TECHNICAL REPORT

SYCAMORE COGENERATION COMPANY (84-AFC-6)

PETITION FOR MINOR AMENDMENT

AUGUST 2004

Prepared by:

URS

1333 Broadway, Suite 800

Oakland, California 94612

Prepared for:

Sycamore Cogeneration Company

Bakersfield, California

26814395

Sycamore Cogeneration Company | Box 80598, Bakersfield, CA 93380 • (661) 392-2630

Neil E. Burgess, Executive Director

August 11, 2004

SY-8088

Ms. Nancy Tronaas
Compliance Project Manager
California Energy Commission
1516 Ninth Street, MS-2000
Sacramento, CA 95814-5512

Re: **Sycamore Cogeneration Company (84-AFC-6)**
Petition for Minor Amendments

Dear Ms. Tronaas:

This petition is being submitted to allow two (2) of the four cogeneration units at Sycamore, Unit 1 and Unit 4, to operate in either in simple cycle mode, or in the current cogeneration configuration. The addition of simple cycle capability is needed because the steam demand in the adjacent oilfield is gradually declining and, in order to respond to current electricity market conditions for the power. The petition also requests a revision to the startup and shutdown emission limit for carbon monoxide, a consolidation of SO_2 and SO_4 emission limits into a single SO_x (as SO_2) emission limit and correction of an inconsistency in the maximum heat input for the turbines in one of the conditions. We are also requesting that the 20-year expiration of the license be eliminated.

The petition requires the elimination or revision of six conditions of certification. This petition is consistent with recent CEC approval of similar amendments to the KRCC facility (82-AFC-2) and the requests we recently submitted to both the San Joaquin Valley Air Pollution Control District (SJVAPCD) and the United States Environmental Protection Agency (EPA). Appendix A includes the complete copy of the SJVAPCD application to modify the current Permits to Operate and Appendix B includes a complete of EPA application to modify the Prevention of Significant Deterioration (PSD) permit. Final action by both agencies is expected in late January. The CEC will be provided with copies of the final approvals as soon as they are available.

We are hopeful that this minor amendment can be reviewed and processed as soon as possible. Please contact Mervyn Soares at (661) 392-2643 or David Stein at (510) 874-3143 if you have any questions regarding these materials.

D L E Burgess

DLB:yh

Attachment

TECHNICAL REPORT

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Appendices

1.0 OVERVIEW

Sycamore Cogeneration Company (Sycamore) received original approval (84-AFC-6) in December 1986 from the California Energy Commission (CEC) for a 300 megawatt (MW) cogeneration plant in Kern County, California. The facility consists of four (4) 75 MW (nominal) natural-gas fired General Electric Frame 7EA combustion turbines equipped with dry Low NOx (DLN) combustors, four (4) unfired heat recovery steam generators (HRSGs), each capable of generating up to 450,000 pounds per hour (lb/hr) of steam for delivery to the adjacent oilfield operator for use in enhanced oil recovery and ancillary equipment.

This petition is being submitted to eliminate the 20-year license expiration date, correct a typographical error in the maximum heat input limit in the CEC license and to allow two (2) of the four cogeneration units, Unit 1 and Unit 4, to operate in either simple cycle mode, or in the current cogeneration configuration. The extension of the license and the addition of simple cycle capability is needed because the steam demand in the adjacent oilfield is gradually declining, but will continue beyond the 20-year license period, and, a portion of the total facility electricity output must be dispatchable in order to respond to anticipated electricity market conditions for the power. Sycamore is also requesting a revision to the air quality condition limiting startup and shutdown emissions for carbon monoxide to increase the limit from 140 lb/hr to 200 lb/hr (1-hour average) and a consolidation of its separate SO_2 and SO_4 emission limits into a single, higher SO_x (as SO_2) emission limit. This petition is consistent with the CEC's recently approved changes to the Kern River Cogeneration Company (KRCC) license (82-AFC-2), a facility that is virtually identical to Sycamore. The petition requires the elimination of one condition of certification limiting the life of the license (II. Demand Conformance, Condition 1.) and two conditions of certification that require Sycamore to operate as a cogeneration facility (III. Engineering Analysis, A. Conformity with Cogeneration Criteria, Condition 1. and AQ-13. A revision to condition of certification AQ-18 limiting startup and shutdown CO emissions is also being requested and a revision to condition AQ-19 reflecting consolidation of separate SO_2 and SO_4 emission limits into a single, higher SO_x (as SO_2) emission limit. Finally, the petition requests that Condition AQ-30 be corrected to be consistent with Condition AQ-5g and the San Joaquin Valley Air Pollution Control District (SJVAPCD) Permit to Operate.

This petition is also consistent with recent requests to modify the Sycamore air quality permits that were submitted to both the San Joaquin Valley Air Pollution Control District (SJVAPCD) and the United States Environmental Protection Agency (EPA). Appendix A includes the complete copy of the SJVAPCD application to modify the current Permits to Operate and Appendix B includes a complete copy of the EPA application to modify the Prevention of Significant Deterioration (PSD) permit. Final action by both agencies is expected by October 2004. The CEC will be provided with copies of the final approvals as soon as they are available.

This petition for a post-certification amendment of Sycamore is being submitted under the provisions of Section 1769 of Title 20, California Administrative Code (CEC *Rules of Practice and Procedure and Power Plant Site Certification Regulations*) to seek a minor modification to the air quality conditions of certification. The petition is organized to address the informational requirements of Section 1769 in the order they appear in the section. The requirement appears in ***bold italics*** followed by a narrative response.

2.0 INFORMATION REQUIRED BY SECTION 1769

(A) A complete description of the proposed modifications, including new language for any conditions that will be affected

Sycamore Cogeneration Company (Sycamore) is a cogeneration facility located in the Kern River oilfield near Bakersfield, CA. The facility employs four (4) General Electric Frame 7EA combustion turbines (CTs) and four (4) unfired heat recovery steam generators (HRSGs) to cogenerate 300 MW (nominal rating) of electricity and 1.8 million pounds per hour of steam for enhanced oil recovery. Each CT/HRSG generates approximately ¼ of the total steam and electricity output. Each CT is equipped with Dry Low NOx (DLN) combustor technology capable of meeting the current SJVAPCD Rule 4703 NOx limit for gas turbines of 16.4 ppmv at 15% O2, dry and a CO emissions limit of 25 ppmv at 15% O2, dry.

As a result of gradually declining steam demand and negotiations regarding the Sycamore electricity contract, it has been determined that two of the four Sycamore CT units must be

able to operate in either cogeneration or simple cycle mode in the future. As a result, Sycamore is requesting that the existing license for Unit 1 and Unit 4 be modified to allow the ability to operate in either cogeneration or simple cycle mode.

No additional physical construction is needed to facilitate the addition of simple cycle operation to Units 1 and 4. Each CT discharges to a HRSG through a transition section that is equipped with a gas-tight bypass stack. In order to operate in simple cycle, the bypass stack damper would be repositioned to block off the HRSG, directing the CT exhaust through the bypass stack to the atmosphere. Since the Dry-Low NOx (DLN) operation is unaffected by the positioning of the bypass damper, the change to simple cycle operation will not impact the effectiveness of the current air pollution control system. As a result, during simple cycle operations there will not be any change in normal short-term CT emission rates.

The current license is based on a continuous, 24-hr day operation. While Sycamore does not propose to specifically restrict its operating schedule in the future, it is anticipated that the power host may operate two units in simple cycle on a dispatch schedule that is anticipated to be substantially fewer hours than historical operations. At the present time, we envision that the simple cycle units would operate in response to peak power demands occurring during the normal work week, Monday through Friday, and would not operate on weekends or holidays. Instead of a 24-hr operation, it is more likely that these two units, if operated in simple cycle, would ultimately operate for no more than a 6 to 8 hr/day. However, to be consistent with the current license, potential-to-emit emissions in the SJVAPCD application have been calculated assuming the equivalent of a 24 hr/day operation, 7 days per week. We also anticipate that the units, if operated in simple cycle, would operate more frequently in the summer peak power period, April through October, and less during the off-peak period of the year, November through March. The addition of simple cycle operation would increase the number of startups and shutdowns to one or two per day for the affected CTs. Although actual emissions may be higher during startups and shutdowns than during current operations, Sycamore will not be increasing permitted maximum hourly, daily or annual emissions, with the exception of the 1-hr CO emission limit during startups and shutdowns as noted below. The consolidation of the separate SO_2 and SO_4 emission limits into a single,

higher SO_x (as SO_2) emission limit is being requested to be consistent with previous CEC and SJVAPCD action on the KRCC operating license.

Based on the above, we have identified proposed changes to conditions of certification are shown in Appendix C.

(B) A discussion of the necessity for the proposed modifications

The modifications are necessary in order to allow Sycamore the operational flexibility to continue to sell power while adjusting to a gradually declining steam demand and need for dispatchable power by the utilities.

(C) If the modification is based on information that was known by the petitioner during the certification proceeding, an explanation why the issue was not raised at that time

This need for dispatchable power and gradual decline in steam demand has come about as a result of contract negotiations regarding the existing power purchase agreement which comes to term in January 2008 and contract negotiations with the thermal host. The modification is not based on information that was known to the petitioner at the time of the certification.

(D) If the modification is based on new information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision, an explanation of why the change should be permitted

The proposed modification is based on new information that was not available at the time of the original decision. First, demand for steam from Sycamore is gradually declining and Sycamore will not be able to continue to produce and sell all of the steam it is capable of generating. Second, the electricity host has indicated that its future resource needs are focused on peaking, not baseload capacity. This new information will necessitate changes to Sycamore's operation that will impact the findings and bases of the final decision in two regards: conversion of two units from cogeneration to either simple cycle or cogeneration will alter the CEC's original findings regarding conformance with Public Resources Code

Section 25134, and conversion to simple cycle will alter the air quality impacts that were reviewed and approved in the original decision.

- Conversion of Two Cogeneration Units to Either Simple Cycle or Cogeneration

At the time of the original license, the facility was required to meet the definition of cogeneration in Public Resources Code Section 25134. A need conformance test based on previous requirements of the Siting Regulations had found the project to be in conformance with the Biennial Report since it would be a cogeneration facility. Under current Commission energy policy, a demand conformance test is no longer applied. While all or a portion of the facility will continue to operate as a cogeneration facility in the future, there is now a market demand for dispatchable peaking capacity. Allowing Sycamore the flexibility to operate 2 units in simple cycle would be consistent with the State's need for additional dispatchable peaking capacity resources. By allowing this existing generation resource to continue to be used, the State would also avoid the environmental impacts associated with siting a new generator of equivalent capacity. In addition, the conversion to simple cycle would result in a beneficial air quality impact.

- Elimination of 20-year expiration of the CEC License

When the license was originally issued, a 20-year license term was imposed to ensure that the facility would conform to the terms of the original standard offer contract and the need tests imposed by the Biennial Report. Since CEC siting regulations no longer include a demand conformance test and there is a continuing market demand for peaking power, it is appropriate to remove this anachronistic restriction, which would potentially deprive the State of the opportunity to access additional dispatchable peaking resources.

- Air Quality Impacts of Simple Cycle

Although there will be a minor increase in allowable 1-hour average CO emissions during startup and shutdown, operation in simple cycle mode will modify the dispersion characteristics of the two affected units. The consolidation of separate SO_2 and SO_4 emission limits into a single, higher SO_x (as SO_2) emission limit reflects no increase in the applicable

emissions and will have no impact on overall SO_x emissions. When Units 1 and 4 are operated in simple cycle mode, the exhaust gas will be discharged through a slightly shorter bypass stack with a higher temperature and a marginally lower stack exit velocity. A comprehensive analysis of these potential changes to exhaust gas stack discharge conditions has been performed. The analysis demonstrates that even under worst-case assumptions there will be no significant adverse impact to ambient air quality.

(E) An analysis of the impacts the modification may have on the environment and proposed measures to mitigate any significant adverse impacts

A complete analysis of the proposed changes has been completed and submitted to the SJVAPCD for review. The application is included as Appendix A. The air quality impact analysis demonstrates that beneficial individual facility and cumulative air quality impacts will result from the proposed changes. Furthermore, the original Sycamore facility was fully mitigated with emission offsets. Since the proposed change will not increase allowable daily or annual emissions from the facility, no additional air quality mitigation is needed. Based on the above, the proposed change will not cause any significant air quality impacts. To the contrary, the air quality impacts are actually beneficial.

No other environmental issues or concerns are impacted by the proposed change and no additional analysis is needed for other environmental issue areas.

(F) A discussion of the impact of the modification on the facility's ability to comply with applicable laws, ordinances, regulations, and standards

The proposed changes will comply with all applicable laws, ordinances, regulations and standards as demonstrated by the attached SJVAPCD (Appendix A). The applicant has also requested that EPA acknowledge that the proposed changes do not constitute a major modification that would be subject to full PSD review. A copy of this request is included (Appendix B). A copy of EPA's response will be forwarded to the CEC under separate cover. While this response will be informative, it is not a requirement for the CEC to process this petition request as Sycamore will comply with all applicable federal laws, ordinances, regulations and standards as it has since it began operation.

(G) A discussion of how the modification affects the public

The proposed revisions will have a not have a significant adverse impact on the public since air quality impacts will be lessened by the proposed change to Sycamore.

(H) A list of property owners potentially affected by the modification

There are no property owners that will be affected by the proposed modification. A single property owner is located within 1000 feet of the Sycamore site, ChevronTexaco. The applicable contact information for ChevronTexaco is provided below:

Property Owner	Physical Address	Mailing Address
ChevronTexaco	1546 China Grade Loop Bakersfield, CA 93302	P.O. Box 1392 Bakersfield, CA 93380

(I) A discussion of the potential effect on near by property owners, the public and the parties in the application proceedings

The proposed revisions will have not have a significant adverse impact on nearby property owners. Air quality modeling demonstrates that the project will continue to operate in conformance with all applicable ambient air quality.

3.0 SCHEDULE

The application for EPA modification of the PSD permit was submitted on June 11, 2004 and the applications to modify the SJVAPCD Permits to Operate were submitted on July 29, 2004. Based on discussions with EPA staff, the project will not be subject to a formal PSD review and we anticipate that EPA will take final action by October 2004. Based on discussions with SJVAPCD, we also anticipate a very streamlined and fast-track review with final action by October 2004. A copy of the final approvals by both agencies will be provided

to the CEC as soon as they are available. We respectfully request that the CEC process this petition to amend the license as expeditiously as is possible.

4.0 SUMMARY

This minor amendment will only affect air quality impacts. There are no changes to any other environmental impact area. The effect of the proposed changes is to allow a allow Sycamore to operate Units 1 and 4 in either simple cycle or cogeneration mode. An air quality impact analysis has been performed to demonstrate that there are no significant impacts from the proposed change (in fact, the proposed change would be beneficial to air quality). The original restriction for the facility to operate as a cogeneration facility and for no more than 20 years is no longer relevant under current market conditions and CEC regulation. Approving this petition will therefore not undermine or negatively impact relevant portions of the original decision that are impacted by the proposed change. SJVAPCD and EPA are both reviewing the proposed change and have indicated that approval should be possible in a matter of weeks. Both agency approvals will be provided to the CEC promptly upon their receipt by Sycamore. We therefore respectfully request that the CEC expedite the processing of this petition to allow simple cycle operation of either Unit 1or Unit 4.

APPENDIX A

APPLICATION TO SJVAPCD TO MODIFY PERMITS TO OPERATE

Sycamore Cogeneration Company | Box 80598, Bakersfield, CA 93380 • (661) 392-2630

Neil E. Burgess, Executive Director

HAND DELIVERED ON:

July 29, 2004

SY-8077

Mr. Tom Goff
Permit Services Manager
San Joaquin Valley APCD - Southern Regional Office
2700 "M" Street, Suite 275
Bakersfield, CA 93301-2370

Re: **ATC Modification Applications S-511-1-9 through S-511-4-9**

Dear Mr. Goff:

Please find attached four authority to construct (ATC) applications to allow Unit 1 and Unit 4 at the Sycamore Cogeneration Company (Sycamore) to operate in either simple cycle mode or in cogeneration mode along with modifications to the start-up/shutdown emissions limits on all four turbine units. A $240 check has been included to cover the application fees.

We are including a CAPP-certified application to allow for an expedited review and a copy of our own air quality impact analysis, demonstrating that there are no significant impacts associated with the proposed change. Please note that the health risk assessment data on the gas turbine forms includes parameters with respect to simple cycle operation. When the units operate in cogeneration mode, no change will exist from current emissions parameters. Please also note that an updated compliance certification form is attached for your records.

If you have any questions, please contact either Mervyn Soares at (661) 392-2643 or our consultant, David Stein of URS at (510) 874-3143. Thank you for your prompt consideration.

N E Burgess

DLB:yh

Attachments
xc: D. Stein – URS-Oakland (w/attachments)

San Joaquin Valley Air Pollution Control District

www.valleyair.org

Permit Application For:

- ☐ AUTHORITY TO CONSTRUCT (ATC) - New Emission Unit.
- ☒ AUTHORITY TO CONSTRUCT (ATC) - Modification Of Emission Unit With Valid PTO/Valid ATC.
- ☐ AUTHORITY TO CONSTRUCT (ATC) - Renewal of Valid Authority to Construct.
- ☐ PERMIT TO OPERATE (PTO) - Existing Emission Unit Now Requiring a Permit to Operate.

1. PERMIT TO BE ISSUED TO: Sycamore Cogeneration Company

2. MAILING ADDRESS:
STREET/P.O. BOX: P.O. Box 81018
CITY: Bakersfield STATE: CA 9-DIGIT ZIP CODE: 93380

3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:
STREET: _____ CITY: _____
north /4 SECTION 31 TOWNSHIP 28S RANGE 28E

WITHIN 1,000 FT OF A SCHOOL? ☐ YES ☒ NO

S.I.C. CODE(S) OF FACILITY (If known): 4911/4931

4. GENERAL NATURE OF BUSINESS: Electricity generation

INSTALL DATE: 1/1/05

5. TITLE V PERMIT HOLDERS ONLY: Do you request a COC (EPA Review) prior to receiving your ATC? ☒ YES ☐ NO

6. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary)

Addition of simple cycle operation Unit 1, S-88-1-9, readdition of the start-up/shutdown CO emissions limit (previously removed for consistency with PSD permit) and the removal of the requirement to operate as a cogeneration facility.

7. PERMIT REVIEW PERIOD: Do you request a three day period to review the draft Authority to Construct permit? ☒ YES ☐ NO
Please note that checking "YES" will delay issuance of your final permit by at least three days.

8. HAVE YOU EVER APPLIED FOR AN ATC OR PTO IN THE PAST? ☒ YES ☐ NO
If yes, ATC/PTO #: S-88-1-9

9. HAVE ALL NECESSARY LAND-USE AUTHORIZATIONS BEEN OBTAINED? (If "No" is checked, please attach explanation.) ☒ YES ☐ NO

10. IS THIS APPLICATION SUBMITTED AS THE RESULT OF EITHER A NOTICE OF VIOLATION OR A NOTICE TO COMPLY? ☐ YES ☒ NO
If yes, NOV/NTC #: _____

Optional Section

11. CHECK WHETHER YOU ARE A PARTICIPANT IN EITHER OF THESE VOLUNTARY PROGRAMS:
"SPARE THE AIR"
☐ Yes ☐ No ☐ Send info
"INSPECT"
☐ Yes ☐ No ☐ Send info

12. TYPE OR PRINT NAME OF APPLICANT: Neil Burgess

TITLE OF APPLICANT: Executive Director

13. SIGNATURE OF APPLICANT: N L E Burgess DATE: July 29, 2004

PHONE #: (661) 392-2643
FAX #: (661) 392-2990
E-MAIL: masoares@sycamore.com

FOR APCD USE ONLY:

DATE STAMP:	FILING FEE RECEIVED: $ _____ CHECK #: _____ DATE PAID: _____ PROJECT #: _____ FACILITY ID: _____

San Joaquin Valley Air Pollution Control District
Supplemental Application Form
Gas Turbines

Please complete one form for each gas turbine.

This form must be accompanied by a completed Application for Authority to Construct and Permit to Operate form

PERMIT TO BE ISSUED TO: Sycamore Cogeneration Company

LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:
North 1/2, Section 31, Township 28S, Range 28E

EQUIPMENT DESCRIPTION

Equipment Details	☒ Industrial Frame ☐ Aero Derivative ☐ Other: _____		
	Manufacturer: GE	Model: 7EA	Serial Number:
	☐ Simple Cycle ☒ Combined Cycle ☐ Co-generation ☐ Other: _____		
	Total Rated Shaft Output Power: 75 MW		
Rule 4703 Type of Use and Emissions Monitoring Provisions	☐ Peaking Unit - limited to no more than 877 hrs/yr of operation ☐ Emergency Standby - limited to less than 200 hrs/yr of operation ☒ Full Time - must have either a Continuous Emission Monitoring System (CEMS) or an alternate emissions monitoring plan (must be approved by the APCO) ☒ CEMS, please specify all pollutants monitored: ☒ NO_x ☒ CO ☒ O_2 ☐ Other _____ ☐ Alternate Emissions Monitoring Plan (please provide details in additional documentation)		
Fuel Use Meter	☒ Gaseous Fuel Meter ☐ Liquid Fuel Meter ☐ None		
Process Data	Will this unit be used in an electric utility rate reduction program? ☐ Yes ☒ No		
Combustor(s)	Manufacturer: GE	Model: 7EA	Number of Combustors: 10
	Maximum Heat Input Rating (for all combustors @ ISO standard conditions): 1,020 MM Btu/hr		
	Water Injection: ☐ Yes ☒ No	Dry Low NO_x Technology: ☒ Yes ☐ No	
	Steam Injection: ☐ Yes ☒ No	Other NO_x Control Technology: _____	

EMISSIONS DATA

Note: See District BACT and District Rule 4703 requirements for applicability to proposed unit at http://www.valleyair.org/busind/pto/bact/chapter3.pdf and http://www.valleyair.org/rules/currntrules/r4703.pdf

Primary Fuel	Primary Fuel Type: ☒ Natural Gas ☐ LPG/Propane ☐ Diesel ☐ Other: _____		
	Higher Heating Value: 1,020 Btu/gal or Btu/scf	Sulfur Content: <0.001 % by weight or gr/scf	
	Maximum Fuel Use @ HHV: 1.1 MM scf/hr or gal/hr	Rated Efficiency (EFF_{Mfg}): 27.9 %	
	Nitrogen Oxides (as NO_2)	16.4 ppmvd	lb/MMBtu
	Carbon Monoxide	25 ppmvd	lb/MMBtu
	Volatile Organic Compounds (as CH_4)	ppmvd	.01176 lb/MMBtu
	Particulate Matter (PM_{10})	5.0 lb/hr	lb/MMBtu
	% O_2, dry basis, if corrected to other than 15%	%	

EMISSIONS DATA (continued)

Secondary Fuel

When will the secondary fuel be used?
☐ Primary fuel curtailment ☐ Simultaneously with primary fuel ☒ Other: Not used

Secondary Fuel Type: ☐ Natural Gas ☐ LPG/Propane ☐ Diesel ☐ Other: Not used

Higher Heating Value: _____ Btu/gal or Btu/scf	Sulfur Content: _____ % by weight or gr/scf	
Maximum Fuel Use @ HHV: _____ scf/hr or gal/hr	Rated Efficiency (EFF_{Mfg}): _____ %	
Nitrogen Oxides (as NO_2)	ppmvd	lb/MMBtu
Carbon Monoxide	ppmvd	lb/MMBtu
Volatile Organic Compounds (as CH_4)	ppmvd	lb/MMBtu
Particulate Matter (PM_{10})	lb/hr	lb/MMBtu
% O_2, dry basis, if corrected to other than 15%	_____ %	

Source of Data (include copies)

☐ Manufacturer's Specifications ☐ Emission Source Test ☒ Other Current PTO

EMISSIONS CONTROL

Emissions Control Equipment

☒ Inlet Air Filter/Cooler ☒ Lube Oil Vent Coalescer

☐ Selective Catalytic Reduction - Manufacturer: _____ Model: _____

☐ Oxidation Catalyst - Manufacturer: _____ Model: _____

Control Efficiencies: NO_x _____%, SO_x _____%, PM_{10} _____%, CO _____%, VOC _____%

☐ Other (please specify)

For units equipped with exhaust gas NO_x control equipment and rated < 10 MW, or rated ≥ 10 MW but operated < 4,000 hr/yr, one may choose at least one of the following alternate emission monitoring schemes in lieu of a CEMS (each option below must be approved by APCO on a case-by-case basis. Please include a detailed proposal for each option chosen):

☐ Periodic NO_x emission concentration ☐ Turbine exhaust O_2 concentration ☐ Air-to-Fuel ratio
☐ Flow rate of reducing agents added to turbine exhaust ☐ Catalyst inlet and outlet temperature ☐ Catalyst inlet and exhaust O_2 conc.
☐ Other operation characteristics as approved by the APCO (specify on attached sheet)

HEALTH RISK ASSESSMENT DATA

Operating Hours

Maximum Operating Schedule: 24 hours per day, and 8760 hours per year

Receptor Data

Distance to nearest Residence	4000 feet	Distance is measured from the proposed stack location to the nearest boundary of the nearest apartment, house, dormitory, etc.
Direction to nearest Residence	SW	Direction from the stack to the receptor, i.e. North or South.
Distance to nearest Business	4000 feet	Distance is measured from the proposed stack location to the nearest boundary of the nearest office building, factory, store, etc.
Direction to nearest Business	SE	Direction from the stack to the receptor, i.e. North or South.

Stack Parameters

Release Height	46.6 feet above grade
Stack Diameter	210.9 inches at point of release
Rain Cap	☐ Flapper-type ☐ Fixed-type ☒ None ☐ Other: _____
Direction of Flow	☒ Vertically Upward ☐ Horizontal ☐ Other: ___° from vert. or ___° from horiz.

Exhaust Data

Flowrate: 1,188,895 acfm Temperature: 1025 °F

Facility Location

☐ Urban (area of dense population) ☒ Rural (area of sparse population)

FOR DISTRICT USE ONLY

Date:	**FID:**	**Project:**	**Public Notice: Y N**
Comments:			

San Joaquin Valley Air Pollution Control District

www.valleyair.org

Permit Application For:

- ☐ AUTHORITY TO CONSTRUCT (ATC) - New Emission Unit.
- ☒ AUTHORITY TO CONSTRUCT (ATC) - Modification Of Emission Unit With Valid PTO/Valid ATC.
- ☐ AUTHORITY TO CONSTRUCT (ATC) - Renewal of Valid Authority to Construct.
- ☐ PERMIT TO OPERATE (PTO) - Existing Emission Unit Now Requiring a Permit to Operate.

1. PERMIT TO BE ISSUED TO: Sycamore Cogeneration Company

2. MAILING ADDRESS: STREET/P.O. BOX: P.O. Box 81018
   CITY: Bakersfield STATE: CA 9-DIGIT ZIP CODE: 93380

3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:
   STREET: _____ CITY: _____
   north /4 SECTION 31 TOWNSHIP 28S RANGE 28E

   WITHIN 1,000 FT OF A SCHOOL? ☐ YES ☒ NO

   S.I.C. CODE(S) OF FACILITY (If known): 4911/4931

4. GENERAL NATURE OF BUSINESS: Electricity generation

   INSTALL DATE: 1/1/05

5. TITLE V PERMIT HOLDERS ONLY: Do you request a COC (EPA Review) prior to receiving your ATC? ☒ YES ☐ NO

6. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary)

   Readdition of the start-up/shutdown CO emissions limit (previously removed for consistency with PSD permit) and the removal of the requirement to operate as a cogeneration facility (Unit 2, S-88-2-9).

7. PERMIT REVIEW PERIOD: Do you request a three day period to review the draft Authority to Construct permit? ☒ YES ☐ NO
   Please note that checking "YES" will delay issuance of your final permit by at least three days.

8. HAVE YOU EVER APPLIED FOR AN ATC OR PTO IN THE PAST? ☒ YES ☐ NO
   If yes, ATC/PTO #: S-88-2-9

9. HAVE ALL NECESSARY LAND-USE AUTHORIZATIONS BEEN OBTAINED? (If "No" is checked, please attach explanation.) ☒ YES ☐ NO

10. IS THIS APPLICATION SUBMITTED AS THE RESULT OF EITHER A NOTICE OF VIOLATION OR A NOTICE TO COMPLY? ☐ YES ☒ NO
    If yes, NOV/NTC #: _____

Optional Section

11. CHECK WHETHER YOU ARE A PARTICIPANT IN EITHER OF THESE VOLUNTARY PROGRAMS:
    "SPARE THE AIR" ☐ Yes ☐ No ☐ Send info
    "INSPECT" ☐ Yes ☐ No ☐ Send info

12. TYPE OR PRINT NAME OF APPLICANT: Neil Burgess
    TITLE OF APPLICANT: Executive Director

13. SIGNATURE OF APPLICANT: Neil E Burgess DATE: July 29 2004
    PHONE #: (661) 392-2643
    FAX #: (661) 392-2990
    E-MAIL: masoares@sycamore.com

FOR APCD USE ONLY:

DATE STAMP:	FILING FEE RECEIVED: $ _____ CHECK #: _____ DATE PAID: _____ PROJECT #: _____ FACILITY ID: _____

San Joaquin Valley Air Pollution Control District
Supplemental Application Form
Gas Turbines

Please complete one form for each gas turbine.

This form must be accompanied by a completed Application for Authority to Construct and Permit to Operate form

PERMIT TO BE ISSUED TO: Sycamore Cogeneration Company

LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:
North 1/2, Section 31, Township 28S, Range 28E

EQUIPMENT DESCRIPTION

Equipment Details	☒ Industrial Frame ☐ Aero Derivative ☐ Other: _____		
	Manufacturer: GE	Model: 7EA	Serial Number:
	☐ Simple Cycle ☒ Combined Cycle ☐ Co-generation ☐ Other: _____		
	Total Rated Shaft Output Power: 75 MW		
Rule 4703 Type of Use and Emissions Monitoring Provisions	☐ Peaking Unit - limited to no more than 877 hrs/yr of operation ☐ Emergency Standby - limited to less than 200 hrs/yr of operation ☒ Full Time - must have either a Continuous Emission Monitoring System (CEMS) or an alternate emissions monitoring plan (must be approved by the APCO) ☒ CEMS, please specify all pollutants monitored: ☒ NO_x ☒ CO ☒ O_2 ☐ Other _____ ☐ Alternate Emissions Monitoring Plan (please provide details in additional documentation)		
Fuel Use Meter	☒ Gaseous Fuel Meter ☐ Liquid Fuel Meter ☐ None		
Process Data	Will this unit be used in an electric utility rate reduction program? ☐ Yes ☒ No		
Combustor(s)	Manufacturer: GE	Model: 7EA	Number of Combustors: 10
	Maximum Heat Input Rating (for all combustors @ ISO standard conditions): 1,020 MM Btu/hr		
	Water Injection: ☐ Yes ☒ No	Dry Low NO_x Technology: ☒ Yes ☐ No	
	Steam Injection: ☐ Yes ☒ No	Other NO_x Control Technology: _____	

EMISSIONS DATA

Note: See District BACT and District Rule 4703 requirements for applicability to proposed unit at http://www.valleyair.org/busind/pto/bact/chapter3.pdf and http://www.valleyair.org/rules/currntrules/r4703.pdf

Primary Fuel	Primary Fuel Type: ☒ Natural Gas ☐ LPG/Propane ☐ Diesel ☐ Other: _____			
	Higher Heating Value: 1,020 Btu/gal or Btu/scf	Sulfur Content: <0.001 % by weight or gr/scf		
	Maximum Fuel Use @ HHV: 1.1 MM scf/hr or gal/hr	Rated Efficiency (EFF_{Mfg}): 27.9 %		
	Nitrogen Oxides (as NO_2)	16.4	ppmvd	lb/MMBtu
	Carbon Monoxide	25	ppmvd	lb/MMBtu
	Volatile Organic Compounds (as CH_4)		ppmvd	.01176 lb/MMBtu
	Particulate Matter (PM_{10})	5.0	lb/hr	lb/MMBtu
	% O_2, dry basis, if corrected to other than 15%		%	

San Joaquin Valley Air Pollution Control District
Supplemental Application Form
Gas Turbines

Please complete one form for each gas turbine.

This form must be accompanied by a completed Application for Authority to Construct and Permit to Operate form

PERMIT TO BE ISSUED TO: Sycamore Cogeneration Company

LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:
North 1/2, Section 31, Township 28S, Range 28E

EQUIPMENT DESCRIPTION

Equipment Details	☒ Industrial Frame ☐ Aero Derivative ☐ Other: _____		
	Manufacturer: GE	Model: 7EA	Serial Number:
	☐ Simple Cycle ☒ Combined Cycle ☐ Co-generation ☐ Other: _____		
	Total Rated Shaft Output Power: 75 MW		
Rule 4703 Type of Use and Emissions Monitoring Provisions	☐ Peaking Unit - limited to no more than 877 hrs/yr of operation ☐ Emergency Standby - limited to less than 200 hrs/yr of operation ☒ Full Time - must have either a Continuous Emission Monitoring System (CEMS) or an alternate emissions monitoring plan (must be approved by the APCO) ☒ CEMS, please specify all pollutants monitored: ☒ NO_x ☒ CO ☒ O_2 ☐ Other _____ ☐ Alternate Emissions Monitoring Plan (please provide details in additional documentation)		
Fuel Use Meter	☒ Gaseous Fuel Meter ☐ Liquid Fuel Meter ☐ None		
Process Data	Will this unit be used in an electric utility rate reduction program? ☐ Yes ☒ No		
Combustor(s)	Manufacturer: GE	Model: 7EA	Number of Combustors: 10
	Maximum Heat Input Rating (for all combustors @ ISO standard conditions): 1,020 MM Btu/hr		
	Water Injection: ☐ Yes ☒ No	Dry Low NO_x Technology: ☒ Yes ☐ No	
	Steam Injection: ☐ Yes ☒ No	Other NO_x Control Technology: _____	

EMISSIONS DATA

Note: See District BACT and District Rule 4703 requirements for applicability to proposed unit at http://www.valleyair.org/busind/pto/bact/chapter3.pdf and http://www.valleyair.org/rules/currntrules/r4703.pdf

Primary Fuel	Primary Fuel Type: ☒ Natural Gas ☐ LPG/Propane ☐ Diesel ☐ Other: _____			
	Higher Heating Value: 1,020 Btu/gal or Btu/scf	Sulfur Content: <0.001 % by weight or gr/scf		
	Maximum Fuel Use @ HHV: 1.1 MM scf/hr or gal/hr	Rated Efficiency (EFF_{Mfg}): 27.9 %		
	Nitrogen Oxides (as NO_2)	16.4	ppmvd	lb/MMBtu
	Carbon Monoxide	25	ppmvd	lb/MMBtu
	Volatile Organic Compounds (as CH_4)		ppmvd	.01176 lb/MMBtu
	Particulate Matter (PM_{10})	5.0	lb/hr	lb/MMBtu
	% O_2, dry basis, if corrected to other than 15%	_____ %		

San Joaquin Valley Air Pollution Control District

www.valleyair.org

Permit Application For:

- ☐ AUTHORITY TO CONSTRUCT (ATC) - New Emission Unit.
- ☒ AUTHORITY TO CONSTRUCT (ATC) - Modification Of Emission Unit With Valid PTO/Valid ATC.
- ☐ AUTHORITY TO CONSTRUCT (ATC) - Renewal of Valid Authority to Construct.
- ☐ PERMIT TO OPERATE (PTO) - Existing Emission Unit Now Requiring a Permit to Operate.

1. PERMIT TO BE ISSUED TO: Sycamore Cogeneration Company

2. MAILING ADDRESS:
STREET/P.O. BOX: P.O. Box 81018
CITY: Bakersfield STATE: CA 9-DIGIT ZIP CODE: 93380

3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:
STREET: _____ CITY: _____
north /4 SECTION 31 TOWNSHIP 28S RANGE 28E

WITHIN 1,000 FT OF A SCHOOL? ☐ YES ☒ NO

S.I.C. CODE(S) OF FACILITY (If known): 4911/4931

4. GENERAL NATURE OF BUSINESS: Electricity generation

INSTALL DATE: 1/1/05

5. TITLE V PERMIT HOLDERS ONLY: Do you request a COC (EPA Review) prior to receiving your ATC? ☒ YES ☐ NO

6. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary)

Readdition of the start-up/shutdown CO emissions limit (previously removed for consistency with PSD permit) and the removal of the requirement to operate as a cogeneration facility (Unit 2, S-88-3-9).

7. PERMIT REVIEW PERIOD: Do you request a three day period to review the draft Authority to Construct permit? ☒ YES ☐ NO
Please note that checking "YES" will delay issuance of your final permit by at least three days.

8. HAVE YOU EVER APPLIED FOR AN ATC OR PTO IN THE PAST? ☒ YES ☐ NO
If yes, ATC/PTO #: S-88-3-9

9. HAVE ALL NECESSARY LAND-USE AUTHORIZATIONS BEEN OBTAINED? ☒ YES ☐ NO
(If "No" is checked, please attach explanation.)

10. IS THIS APPLICATION SUBMITTED AS THE RESULT OF EITHER A NOTICE OF VIOLATION OR A NOTICE TO COMPLY? ☐ YES ☒ NO
If yes, NOV/NTC #: _____

Optional Section

11. CHECK WHETHER YOU ARE A PARTICIPANT IN EITHER OF THESE VOLUNTARY PROGRAMS:

"SPARE THE AIR"
☐ Yes ☐ No ☐ Send info

"INSPECT"
☐ Yes ☐ No ☐ Send info

12. TYPE OR PRINT NAME OF APPLICANT: Neil Burgess

TITLE OF APPLICANT: Executive Director

13. SIGNATURE OF APPLICANT: Neil E Burgess DATE: July 29, 2004

PHONE #: (661) 392-2643
FAX #: (661) 392-2990
E-MAIL: masoares@sycamore.com

FOR APCD USE ONLY:

DATE STAMP:

FILING FEE RECEIVED: $_____ CHECK #:_____

DATE PAID: _____

PROJECT #: _____ FACILITY ID:_____

EMISSIONS DATA (continued)

Secondary Fuel

When will the secondary fuel be used?
☐ Primary fuel curtailment ☐ Simultaneously with primary fuel ☒ Other: Not used

Secondary Fuel Type: ☐ Natural Gas ☐ LPG/Propane ☐ Diesel ☐ Other: Not used

Higher Heating Value: _____ Btu/gal or Btu/scf	Sulfur Content: _____ % by weight or gr/scf	
Maximum Fuel Use @ HHV: _____ scf/hr or gal/hr	Rated Efficiency (EFF_{Mfg}): _____ %	
Nitrogen Oxides (as NO_2)	ppmvd	lb/MMBtu
Carbon Monoxide	ppmvd	lb/MMBtu
Volatile Organic Compounds (as CH_4)	ppmvd	lb/MMBtu
Particulate Matter (PM_{10})	lb/hr	lb/MMBtu
% O_2, dry basis, if corrected to other than 15%	_____ %	

Source of Data (include copies)

☐ Manufacturer's Specifications ☐ Emission Source Test ☒ Other Current PTO

EMISSIONS CONTROL

Emissions Control Equipment

☒ Inlet Air Filter/Cooler ☒ Lube Oil Vent Coalescer

☐ Selective Catalytic Reduction - Manufacturer: _____ Model: _____

☐ Oxidation Catalyst - Manufacturer: _____ Model: _____

Control Efficiencies: NO_x ____%, SO_x ____%, PM_{10} ____%, CO ____%, VOC ____%

☐ Other (please specify)

For units equipped with exhaust gas NO_x control equipment and rated < 10 MW, or rated ≥ 10 MW but operated < 4,000 hr/yr, one may choose at least one of the following alternate emission monitoring schemes in lieu of a CEMS (each option below must be approved by APCO on a case-by-case basis. Please include a detailed proposal for each option chosen):

☐ Periodic NO_x emission concentration ☐ Turbine exhaust O_2 concentration ☐ Air-to-Fuel ratio
☐ Flow rate of reducing agents added to turbine exhaust ☐ Catalyst inlet and outlet temperature ☐ Catalyst inlet and exhaust O_2 conc.
☐ Other operation characteristics as approved by the APCO (specify on attached sheet)

HEALTH RISK ASSESSMENT DATA

Operating Hours

Maximum Operating Schedule: 24 hours per day, and 8760 hours per year

Receptor Data

Distance to nearest Residence	4000 feet	Distance is measured from the proposed stack location to the nearest boundary of the nearest apartment, house, dormitory, etc.
Direction to nearest Residence	SW	Direction from the stack to the receptor, i.e. North or South.
Distance to nearest Business	4000 feet	Distance is measured from the proposed stack location to the nearest boundary of the nearest office building, factory, store, etc.
Direction to nearest Business	SE	Direction from the stack to the receptor, i.e. North or South.

Stack Parameters

Release Height	46.6 feet above grade
Stack Diameter	210.9 inches at point of release
Rain Cap	☐ Flapper-type ☐ Fixed-type ☒ None ☐ Other: _____
Direction of Flow	☒ Vertically Upward ☐ Horizontal ☐ Other: ___° from vert. or ___° from horiz.

Exhaust Data

Flowrate: 1,188,895 acfm Temperature: 1025 °F

Facility Location

☐ Urban (area of dense population) ☒ Rural (area of sparse population)

FOR DISTRICT USE ONLY

Date:	FID:	Project:	Public Notice: Y N
Comments:			

EMISSIONS DATA (continued)

Secondary Fuel

When will the secondary fuel be used?
☐ Primary fuel curtailment ☐ Simultaneously with primary fuel ☒ Other: Not used

Secondary Fuel Type: ☐ Natural Gas ☐ LPG/Propane ☐ Diesel ☐ Other: Not used

Higher Heating Value: _____ Btu/gal or Btu/scf	Sulfur Content: _____ % by weight or gr/scf
Maximum Fuel Use @ HHV: _____ scf/hr or gal/hr	Rated Efficiency (EFF_{Mfg}): _____ %

Nitrogen Oxides (as NO_2)	ppmvd	lb/MMBtu
Carbon Monoxide	ppmvd	lb/MMBtu
Volatile Organic Compounds (as CH_4)	ppmvd	lb/MMBtu
Particulate Matter (PM_{10})	lb/hr	lb/MMBtu
% O_2, dry basis, if corrected to other than 15%	_____ %	

Source of Data (include copies): ☐ Manufacturer's Specifications ☐ Emission Source Test ☒ Other Current PTO

EMISSIONS CONTROL

Emissions Control Equipment

☒ Inlet Air Filter/Cooler ☒ Lube Oil Vent Coalescer

☐ Selective Catalytic Reduction - Manufacturer: _____ Model: _____

☐ Oxidation Catalyst - Manufacturer: _____ Model: _____

Control Efficiencies: NO_x _____%, SO_x _____%, PM_{10} _____%, CO _____%, VOC _____%

☐ Other (please specify)

For units equipped with exhaust gas NO_x control equipment and rated < 10 MW, or rated ≥ 10 MW but operated < 4,000 hr/yr, one may choose at least one of the following alternate emission monitoring schemes in lieu of a CEMS (each option below must be approved by APCO on a case-by-case basis. Please include a detailed proposal for each option chosen):

☐ Periodic NO_x emission concentration ☐ Turbine exhaust O_2 concentration ☐ Air-to-Fuel ratio
☐ Flow rate of reducing agents added to turbine exhaust ☐ Catalyst inlet and outlet temperature ☐ Catalyst inlet and exhaust O_2 conc.
☐ Other operation characteristics as approved by the APCO (specify on attached sheet)

HEALTH RISK ASSESSMENT DATA

Operating Hours: Maximum Operating Schedule: 24 hours per day, and 8760 hours per year

Receptor Data

Distance to nearest Residence	4000 feet	Distance is measured from the proposed stack location to the nearest boundary of the nearest apartment, house, dormitory, etc.
Direction to nearest Residence	SW	Direction from the stack to the receptor, i.e. North or South.
Distance to nearest Business	4000 feet	Distance is measured from the proposed stack location to the nearest boundary of the nearest office building, factory, store, etc.
Direction to nearest Business	SE	Direction from the stack to the receptor, i.e. North or South.

Stack Parameters

Release Height	46.6 feet above grade
Stack Diameter	210.9 inches at point of release
Rain Cap	☐ Flapper-type ☐ Fixed-type ☒ None ☐ Other: _____
Direction of Flow	☒ Vertically Upward ☐ Horizontal ☐ Other: ___° from vert. or ___° from horiz.

Exhaust Data: Flowrate: 1,188,895 acfm | Temperature: 1025 °F

Facility Location: ☐ Urban (area of dense population) ☒ Rural (area of sparse population)

FOR DISTRICT USE ONLY

Date:	**FID:**	**Project:**	**Public Notice: Y N**
Comments:			

San Joaquin Valley Air Pollution Control District

www.valleyair.org

Permit Application For:

- ☐ AUTHORITY TO CONSTRUCT (ATC) - New Emission Unit.
- ☒ AUTHORITY TO CONSTRUCT (ATC) - Modification Of Emission Unit With Valid PTO/Valid ATC.
- ☐ AUTHORITY TO CONSTRUCT (ATC) - Renewal of Valid Authority to Construct.
- ☐ PERMIT TO OPERATE (PTO) - Existing Emission Unit Now Requiring a Permit to Operate.

1. PERMIT TO BE ISSUED TO: Sycamore Cogeneration Company

2. MAILING ADDRESS:
STREET/P.O. BOX: P.O. Box 81018
CITY: Bakersfield STATE: CA 9-DIGIT ZIP CODE: 93380

3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:
STREET: _____ CITY: _____
north /4 SECTION 31 TOWNSHIP 28S RANGE 28E

WITHIN 1,000 FT OF A SCHOOL? ☐ YES ☒ NO

S.I.C. CODE(S) OF FACILITY (If known): 4911/4931

4. GENERAL NATURE OF BUSINESS: Electricity generation

INSTALL DATE: 1/1/05

5. TITLE V PERMIT HOLDERS ONLY: Do you request a COC (EPA Review) prior to receiving your ATC? ☒ YES ☐ NO

6. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary)

Addition of simple cycle operation Unit 4, S-88-4-9, readdition of the start-up/shutdown CO emissions limit (previously removed for consistency with PSD permit) and the removal of the requirement to operate as a cogeneration facility.

7. PERMIT REVIEW PERIOD: Do you request a three day period to review the draft Authority to Construct permit? ☒ YES ☐ NO
Please note that checking "YES" will delay issuance of your final permit by at least three days.

8. HAVE YOU EVER APPLIED FOR AN ATC OR PTO IN THE PAST? ☒ YES ☐ NO
If yes, ATC/PTO #: S-88-4-9

9. HAVE ALL NECESSARY LAND-USE AUTHORIZATIONS BEEN OBTAINED? ☒ YES ☐ NO
(If "No" is checked, please attach explanation.)

10. IS THIS APPLICATION SUBMITTED AS THE RESULT OF EITHER A NOTICE OF VIOLATION OR A NOTICE TO COMPLY? ☐ YES ☒ NO
If yes, NOV/NTC #: _____

Optional Section

11. CHECK WHETHER YOU ARE A PARTICIPANT IN EITHER OF THESE VOLUNTARY PROGRAMS:

"SPARE THE AIR"
☐ Yes ☐ No ☐ Send info

"INSPECT"
☐ Yes ☐ No ☐ Send info

12. TYPE OR PRINT NAME OF APPLICANT: Neil Burgess

TITLE OF APPLICANT: Executive Director

13. SIGNATURE OF APPLICANT: Neil E Burgess DATE: July 29, 2004

PHONE #: (661) 392-2643
FAX #: (661) 392-2990
E-MAIL: masoares@sycamore.com

FOR APCD USE ONLY:

DATE STAMP:	FILING FEE RECEIVED: $ _____ CHECK #: _____ DATE PAID: _____ PROJECT #: _____ FACILITY ID: _____

San Joaquin Valley Air Pollution Control District
Supplemental Application Form
Gas Turbines

Please complete one form for each gas turbine.

This form must be accompanied by a completed Application for Authority to Construct and Permit to Operate form

PERMIT TO BE ISSUED TO: Sycamore Cogeneration Company

LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:
North 1/2, Section 31, Township 28S, Range 28E

EQUIPMENT DESCRIPTION

Equipment Details

☒ Industrial Frame ☐ Aero Derivative ☐ Other: _____

Manufacturer: GE | Model: 7EA | Serial Number:

☐ Simple Cycle ☒ Combined Cycle ☐ Co-generation ☐ Other: _____

Total Rated Shaft Output Power: 75 MW

Rule 4703 Type of Use and Emissions Monitoring Provisions

☐ Peaking Unit - limited to no more than 877 hrs/yr of operation

☐ Emergency Standby - limited to less than 200 hrs/yr of operation

☒ Full Time - must have either a Continuous Emission Monitoring System (CEMS) or an alternate emissions monitoring plan (must be approved by the APCO)

☒ CEMS, please specify all pollutants monitored: ☒ NO_x ☒ CO ☒ O_2 ☐ Other _____

☐ Alternate Emissions Monitoring Plan (please provide details in additional documentation)

Fuel Use Meter

☒ Gaseous Fuel Meter ☐ Liquid Fuel Meter ☐ None

Process Data

Will this unit be used in an electric utility rate reduction program? ☐ Yes ☒ No

Combustor(s)

Manufacturer: GE | Model: 7EA | Number of Combustors: 10

Maximum Heat Input Rating (for all combustors @ ISO standard conditions): 1,020 MM Btu/hr

Water Injection: ☐ Yes ☒ No | Dry Low NO_x Technology: ☒ Yes ☐ No

Steam Injection: ☐ Yes ☒ No | Other NO_x Control Technology: _____

EMISSIONS DATA

Note: See District BACT and District Rule 4703 requirements for applicability to proposed unit at http://www.valleyair.org/busind/pto/bact/chapter3.pdf and http://www.valleyair.org/rules/currntrules/r4703.pdf

Primary Fuel

Primary Fuel Type: ☒ Natural Gas ☐ LPG/Propane ☐ Diesel ☐ Other: _____

Higher Heating Value: 1,020 Btu/gal or Btu/scf | Sulfur Content: <0.001 % by weight or gr/scf

Maximum Fuel Use @ HHV: 1.1 MM scf/hr or gal/hr | Rated Efficiency (EFF_{Mfg}): 27.9 %

Nitrogen Oxides (as NO_2)	16.4	ppmvd	lb/MMBtu
Carbon Monoxide	25	ppmvd	lb/MMBtu
Volatile Organic Compounds (as CH_4)		ppmvd	.01176 lb/MMBtu
Particulate Matter (PM_{10})	5.0	lb/hr	lb/MMBtu
% O_2, dry basis, if corrected to other than 15%	_____	%	

EMISSIONS DATA (continued)

Secondary Fuel

When will the secondary fuel be used?
☐ Primary fuel curtailment ☐ Simultaneously with primary fuel ☒ Other: Not used

Secondary Fuel Type: ☐ Natural Gas ☐ LPG/Propane ☐ Diesel ☐ Other: Not used

Higher Heating Value: _____ Btu/gal or Btu/scf	Sulfur Content: _____ % by weight or gr/scf	
Maximum Fuel Use @ HHV: _____ scf/hr or gal/hr	Rated Efficiency (EFF_{Mfg}): _____ %	
Nitrogen Oxides (as NO_2)	ppmvd	lb/MMBtu
Carbon Monoxide	ppmvd	lb/MMBtu
Volatile Organic Compounds (as CH_4)	ppmvd	lb/MMBtu
Particulate Matter (PM_{10})	lb/hr	lb/MMBtu
% O_2, dry basis, if corrected to other than 15%	_____ %	

Source of Data (include copies)

☐ Manufacturer's Specifications ☐ Emission Source Test ☒ Other Current PTO

EMISSIONS CONTROL

Emissions Control Equipment

☒ Inlet Air Filter/Cooler ☒ Lube Oil Vent Coalescer

☐ Selective Catalytic Reduction - Manufacturer: _____ Model: _____

☐ Oxidation Catalyst - Manufacturer: _____ Model: _____

Control Efficiencies: NO_x _____%, SO_x _____%, PM_{10} _____%, CO _____%, VOC _____%

☐ Other (please specify)

For units equipped with exhaust gas NO_x control equipment and rated < 10 MW, or rated ≥ 10 MW but operated < 4,000 hr/yr, one may choose at least one of the following alternate emission monitoring schemes in lieu of a CEMS (each option below must be approved by APCO on a case-by-case basis. Please include a detailed proposal for each option chosen):

☐ Periodic NO_x emission concentration ☐ Turbine exhaust O_2 concentration ☐ Air-to-Fuel ratio
☐ Flow rate of reducing agents added to turbine exhaust ☐ Catalyst inlet and outlet temperature ☐ Catalyst inlet and exhaust O_2 conc.
☐ Other operation characteristics as approved by the APCO (specify on attached sheet)

HEALTH RISK ASSESSMENT DATA

Operating Hours

Maximum Operating Schedule: 24 hours per day, and 8760 hours per year

Receptor Data

Distance to nearest Residence	4000 feet	Distance is measured from the proposed stack location to the nearest boundary of the nearest apartment, house, dormitory, etc.
Direction to nearest Residence	SW	Direction from the stack to the receptor, i.e. North or South.
Distance to nearest Business	4000 feet	Distance is measured from the proposed stack location to the nearest boundary of the nearest office building, factory, store, etc.
Direction to nearest Business	SE	Direction from the stack to the receptor, i.e. North or South.

Stack Parameters

Release Height	46.6 feet above grade
Stack Diameter	210.9 inches at point of release
Rain Cap	☐ Flapper-type ☐ Fixed-type ☒ None ☐ Other: _____
Direction of Flow	☒ Vertically Upward ☐ Horizontal ☐ Other: ___° from vert. or ___° from horiz.

Exhaust Data

Flowrate: 1,188,895 acfm Temperature: 1025 °F

Facility Location

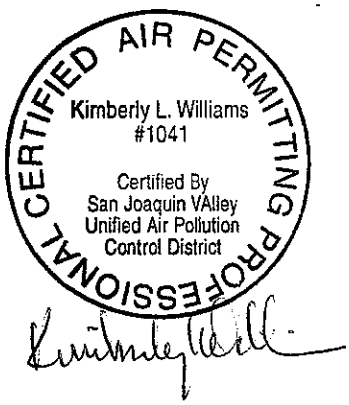
☐ Urban (area of dense population) ☒ Rural (area of sparse population)

FOR DISTRICT USE ONLY

Date:	FID:	Project:	Public Notice: Y N
Comments:			

San Joaquin Valley Unified Air Pollution Control District Application Review

Facility Name:	**Sycamore Cogeneration Company**
Mailing Address:	**P.O. Box 80598** **Bakersfield, CA 93380**
Contact Name:	**Mervyn Soares** **Sycamore Cogeneration Company**
Telephone:	**(661) 392-2643**
Fax:	**(661) 392-2990**
E-Mail:	**masoares@sycamore.com**
Contact Name:	**Daniel Beck** **Sycamore Cogeneration Company**
Telephone:	**(661) 392-2461**
Fax:	**(661) 392-2990**
E-Mail:	**dlbeck@sycamore.com**
Other Contact:	**David Stein** **URS**
Telephone:	**(510) 874-3143**
E-Mail:	**david_stein@urscorp.com**
CAPP Engineer:	**Kimberly Williams** **Sycamore Cogeneration Company**
Telephone:	**(661) 392-2804**
Fax:	**(661) 392-2990**
E-Mail:	**klwilliams@sycamore.com**



Processing Engineer:	**Steve Tomlin, Sr. Air Quality Engineer**
Lead Engineer:	**Leonard Scandura, Sup. Air Quality Engineer**
Date:	
Project Number:	**S-_____**
Application Numbers:	**S-511-1-9, -2-9, 3-9 and S-511-4-9**
Submitted:	**July 29, 2004**
Complete:	

I. PROPOSAL

Sycamore Cogeneration Company (Sycamore) is a cogeneration facility located in the Kern River oilfield near Bakersfield, CA. The facility employs four (4) General Electric Frame 7EA combustion turbines (CTs) and four (4) unfired heat recovery steam generators (HRSGs) to cogenerate 300 MW (nominal rating) of electricity and 1.8 million pounds per hour of steam for enhanced oil recovery. These units are part of ChevronTexaco's Heavy Oil Central Stationary Source in the Kern County Oil Fields.

A. Sycamore is requesting that the existing Permits to Operate (PTOs) for Unit 1 (S-511-1) and Unit 4 (S-511-4) be modified to allow an additional mode of operation: producing electricity without recovering exhaust heat ("simple cycle" mode). The two units will still maintain the physical and operational ability to recovery heat in the form of steam. The proposed addition to simple cycle involves a redirection of the CT exhaust through an existing bypass stack. No physical changes to the units are needed to accommodate this operation.

   This request is being made based on anticipated gradual declining steam demand and negotiations regarding the Sycamore electricity contract.

B. Sycamore is also requesting that the 2-hr average emission limit for CO of 140 lb/hr for startups and shutdowns be re-instated. These were in the original DLN combustor retrofit/Rule 4703 compliance project and subsequent PTOs. These were removed when the Title V permit was issued to retain consistency with the EPA PSD permit, which did not recognize a separate startup and shutdown limit. Sycamore has applied to amend the PSD permit to include simple cycle operation and to specifically add a CO startup and shutdown limit of 140 lb/hr (2-hr average.)

C. In addition, the permits for units #1, #2, #3, and #4 (S-511-1, -2, -3, & -4) are being revised to remove a condition that requires the facility to operate as a cogeneration facility per Public Resources Code 15234. The District did not use this definition of a cogeneration facility in the original evaluation or in any subsequent approvals.

D. Also, SO_2 and SO_4 emissions rates will be combined into a single SO_X as SO_2 emission rate consistent with current District practice, based on the molecular weights (2/3 times SO_4 factor is added to the SO2 factor to yield a SO_X as SO_2 factor).

E. Finally, a 1-hour average CO emission limit of 200 lb/hr per turbine will be added to the permits for S-511-1 and S-511-4 to validate short-term emission modeling. The 3-hour average CO emission limits applicable during periods of normal operation of 25 ppmv @ 15%O_2 and 44.0 lb/hr remain intact.

II. APPLICABLE RULES

Rule 1080	Stack Monitoring (12/17/92)
Rule 1081	Source Sampling (12/16/93)
Rule 2201	New and Modified Stationary Source Review (12/19/02)
Rule 2520	Federally Mandated Operating Permits (6/15/95)
Rule 2540	Acid Rain Program (11/13/97)
Rule 4001	NSPS Subpart GG – Standards of Performance for Stationary Gas Turbines (04/14/99)
Rule 4101	Visible Emissions (12/17/92)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4301	Fuel Burning Equipment (12/17/92)
Rule 4703	Stationary Gas Turbines (04/25/02)
Rule 4801	Sulfur Compounds (12/17/92)

CH&S Code, Section 41700

III. PROJECT LOCATION

Sycamore is located in the center of the north ½ of Section 31, Township 28 South, Range 28 East in the Kern River Oil Field, within the central Kern County oil fields. There are no schools within 1000 feet of the project site.

IV. PROCESS DESCRIPTION

No additional physical construction is needed to facilitate operation of Units 1 and 4 without recovery exhaust heat. Each combustion turbine (CT) discharges to a heat recovery steam generator (HRSG) through a transition section that is equipped with a gas-tight bypass stack. In order to operate without recovering exhaust heat, the bypass stack damper would be repositioned to block off the HRSG, directing the CT exhaust through the bypass stack to the atmosphere. Since the Dry-Low NOx (DLN) operation is unaffected by the positioning of the bypass damper, routing the exhaust through the bypass stack will not impact the current air pollution control system. As a result, no changes in permitted emissions limitations are required; only additional limitations will be added.

The current Sycamore permit allows 24-hr a day operation. While Sycamore does not propose to specifically restrict its operating schedule in the future, it is anticipated that Units 1 and 4 would operate substantially fewer hours than historical operations, if operated as simple cycle units. When operated in simple cycle mode, Sycamore envisions that these units would operate without recovering exhaust heat in response to peak power demands occurring during the normal work week, Monday through Friday, and would not operate on weekends or holidays. Instead of a 24-hr operation, these two units may ultimately operate for no more than a 6 to 8 hr/day without recovering exhaust heat. Sycamore also anticipates that the units would operate more frequently in the summer peak power period, April through October, and less during the off-peak period of the year, November through March, if operated as simple cycle units. When operating without recovering exhaust heat, the number of startups

and shutdowns for the affected CT will likely be higher due to power demands. Although actual startups and shutdown emissions may be higher for simple cycle operations than during current operations (due to more frequent startups and shutdowns), no change in permitted maximum hourly, daily or annual emissions is proposed or required, with the exception of re-instating the 2-hr CO emission limit during startups and shutdowns as noted below, and adding a 1-hr CO emission limit to validate short-term modeling.

Sycamore is requesting that the 2-hr emission limit for CO of 140 lb/hr for startups and shutdowns that had been removed when the Title V permit was issued be reinstated. The CO 2-hr startup and shutdown limit that was in the original DLN combustor retrofit/Rule 4703 compliance project and subsequent PTOs had been removed to retain consistency with the EPA PSD permit, which did not recognize a separate startup and shutdown limit. Sycamore has applied to amend the PSD permit to include simple cycle operation and to specifically add a CO startup and shutdown limit of 140 lb/hr (2-hr average.)

V. EQUIPMENT LISTING

S-511-1-9: 75 MW GENERAL ELECTRIC MODEL 7EA NATURAL GAS-FIRED COMBUSTION TURBINE WITH DRY LOW NOX COMBUSTORS DISCHARGING TO ATMOSPHERE THROUGH UNFIRED 450,000 LB/HR HEAT RECOVERY STEAM GENERATOR WHEN OPERATED IN COGENERATION MODE (SYCAMORE UNIT #1)

S-511-2-9: 75 MW GENERAL ELECTRIC MODEL 7EA NATURAL GAS-FIRED COMBUSTION TURBINE WITH DRY LOW NOX COMBUSTORS DISCHARGING TO ATMOSPHERE THROUGH UNFIRED 450,000 LB/HR HEAT RECOVERY STEAM GENERATOR WHEN OPERATED IN COGENERATION MODE (SYCAMORE UNIT #2)

S-511-3-9: 75 MW GENERAL ELECTRIC MODEL 7EA NATURAL GAS-FIRED COMBUSTION TURBINE WITH DRY LOW NOX COMBUSTORS DISCHARGING TO ATMOSPHERE THROUGH A BYPASS STACK WHEN OPERATED IN SIMPLE CYCLE MODE OR THROUGH UNFIRED 450,000 LB/HR HEAT RECOVERY STEAM GENERATOR WHEN OPERATED IN COGENERATION MODE (SYCAMORE UNIT #3)

S-511-4-9: 75 MW GENERAL ELECTRIC MODEL 7EA NATURAL GAS-FIRED COMBUSTION TURBINE WITH DRY LOW NOX COMBUSTORS DISCHARGING TO ATMOSPHERE THROUGH A BYPASS STACK WHEN OPERATED IN SIMPLE CYCLE MODE OR UNFIRED 450,000 LB/HR HEAT RECOVERY STEAM GENERATOR WHEN OPERATED IN COGENERATION MODE (SYCAMORE UNIT #4)

See Attachment A for copies of conditions and equipment description for current Permits to Operate

VI. EMISSION CONTROL TECHNOLOGY EVALUATION

The combustion turbines utilize GE's proprietary Dry Low NOx (DLN) technology. The DLN technology employs lean premixed combustion to stage combustion, resulting in reduced NOx formation. The DLN system installed at Sycamore is currently limited to 16.4 ppmv NOx and 25 ppmv CO, dry at 15% oxygen. No post-combustion emission control for either NO_x or CO is required with this system.

VII. CALCULATIONS

Proposed changes to permit units S-511-1 and -4 are not subject to Rule 2201 as deleting the one permit condition that requires the facility to operate as a cogeneration facility per Public Resources Code 15234 is not an NSR modification. The District did not use this definition of a cogeneration facility in the original evaluation or in any subsequent approvals. Therefore, calculations are not required for these units.

For all units, SO_2 and SO_4 emissions rates will be combined into a single SO_X as SO_2 emission rate consistent with current District practice, based on the molecular weights (2/3 times SO4 factor is added to the SO_2 factor to yield a SO_X as SO_2 factor).

A. Assumptions:

Operating schedule: 24 hr/day, 365 day/yr

B. Emission Factors:

Emission factors are identical for both S-511-1 and S-511-4. The maximum air contaminant mass emission rates (lb/hr), concentrations (ppmvd @ 15% O_2), and startup and shutdown emissions rates for the CTGs are summarized below based on current permit conditions:

Table VII-1. Emission Factors During Normal Operations

	NO_X	CO	VOC	PM_{10}	SO_X
Mass Emission Rates (per turbine, lb/hr)	79.7 (1-hr avg) 67.9 (3-hr avg)	44 (3-hr avg)	12	5.0	0.9
ppmvd @ 15% O_2 limits	16.4 (3-hr avg)	25 (3-hr avg)	--	--	--

Table VII-2. Emission Factors During Startups and Shutdowns

	NO_X	CO	VOC	PM_{10}	SO_X
Mass Emission Rates (per turbine, lb/hr)	140 (2-hr avg)	140 (2-hr avg)	12	5.0	0.9

It is noteworthy that the emission factors for both the pre-project and post-project cases are identical.

C. CALCULATIONS

1. Pre-Project Potential to Emit (PE1)

The pre-project potential to emit is equivalent to PE2 and is identical for both S-511-1 and S-511-4.

Table VII-3. Maximum Emissions, lb/hr[1]

Permit Unit	NO_X	CO	VOC	PM_{10}	SO_X
S-511-1-8	140[2]	44[3]	12	5.0	0.9
S-511-4-8	140[2]	44[3]	12	5.0	0.9
Total	280	88	24	10	1.8

[1] Based on current Permit to Operate
[2] Maximum emissions for startup only. Maximum emissions during normal operation are shown in Table VII-1, above.
[3] The startup/shutdown CO limit of 140 lb/hr was removed from the Title V permit and Sycamore now proposes to reinstate it without increasing current maximum daily CO emissions.

Table VII-4. Maximum Daily Emissions, lb/day (PE1)

Permit Unit	NO_X	CO	VOC	PM_{10}	SO_X
S-511-1-8	1629.6[1]	1056[1]	288[2]	120[2]	21.6[2]
S-511-1-8	1629.6[1]	1056[1]	288[2]	120[2]	21.6[2]
Total	3259.4	2112	576	240	43.2

[1] Current Permit to Operate emission limit (includes startup and shutdown emissions)
[2] Maximum hourly emissions (Table VII-3), lb/hr x 24 hr/day

Table VII-5. Maximum Annual Emissions, lb/yr[1]

Permit Unit	NO_X	CO	VOC	PM_{10}	SO_X
S-511-1-8	594804	385440	105120	43800	7884
S-511-4-8	594804	385440	105120	43800	7884
Total	1189682	770880	210240	87600	15768

[1] Maximum daily emissions, lb/day x 365 day/yr

2. Historically Adjusted Potential to Emit (HAPE)

As set forth is Rule 2201, Section 4.4, the historically adjusted potential to emit for each unit is calculated as:

HAPE = PE1 x (EF2/EF1)

Since the emission factors reported in Section B, above, are identical for both the pre-project and post-project case, EF2 = EF1. Therefore,

HAPE = PE1

The HAPE is identical for both S-88-3 and S-88-4 as is shown in section 1., above as:

Table VII-6. Historically Adjusted Potential to Emit, lb/day (HAPE)

Permit Unit	NO_X	CO	VOC	PM_{10}	SO_X
S-511-1-8	1629.6[1]	1056[1]	288[2]	120[2]	21.6[2]
S-511-1-8	1629.6[1]	1056[1]	288[2]	120[2]	21.6[2]

[1] Current Permit to Operate emission limit (includes startup and shutdown emissions)
[2] Maximum hourly emissions (Table VII-3), lb/hr x 24 hr/day.

3. Post-Project Potential to Emit (PE2)

The applicant is proposing to reinstate the startup/shutdown emission limit of 140 lb/hr (2-hr avg) that was removed when the Title V permit was issued. In addition, a CO emission limit of 200 lb/hr (1-hr avg) will be added to the permit to validate short-term modeling. All other hourly and daily emission limits remain unchanged.

Table VII-7. Post-Project Maximum Emissions, lb/hr[1]

Permit Unit	NO_X	CO	VOC	PM_{10}	SO_X
S-511-1-9	140[2]	140[2,3,4]	12	5.0	0.9
S-511-4-9	140[2]	140[2,3,4]	12	5.0	0.9
Total	280	280	24	10	1.8

[1] Based on current Permit to Operate
[2] Maximum emissions for startup only. Maximum emissions during normal operation are shown in Table VII-1, above.
[3] The startup/shutdown CO limit of 140 lb/hr was removed from the Title V permit and Sycamore now proposes to reinstate it without increasing current maximum daily CO emissions.
[4] The existing permits contains only a 3-hour average for CO, and not a 1-hour average. In order to validate the CO modeling performed by the District within this project, a 1-hour average limit of 200 lb/hr per turbine will be added. The existing 3-hour average for normal operation of 44 lb/hr for CO will continue to be included on the permits as well as the reinstated 3-hour average of 140 lb/hr for startups.

Table VII-8. Post-Project Maximum Daily Emissions, lb/day

Permit Unit	NO_X	CO	VOC	PM_{10}	SO_X
S-511-1-9	1629.6[1]	1056[1]	288[2]	120[2]	21.6[2]
S-511-4-9	1629.6[1]	1056[1]	288[2]	120[2]	21.6[2]
Total	3259.2	2112	576	240	43.2

[1] Current Permit to Operate emission limit (includes startup and shutdown emissions)
[2] Maximum hourly emissions (Table VII-3), lb/hr x 24 hr/day

Table VII-9. Post-Project Maximum Annual Emissions, lb/yr[1]

Permit Unit	NO_X	CO	VOC	PM_{10}	SO_X
S-511-1-8	594841	385440	105120	43800	7884
S-511-4-9	594841	385440	105120	43800	7884
Total	1189682	770880	210240	87600	15768

[1] Maximum daily emissions, lb/day x 365 day/yr

4. Adjusted Increase In Permitted Emissions (AIPE)

As set forth in Rule 2201, Section 4.3, the adjusted increase in permitted emissions is calculated as:

AIPE = PE2 – HAPE

Table VII-10. Adjusted Increase In Permitted Emission, lb/day (AIPE)

Permit Unit	NO_X	CO	VOC	PM_{10}	SO_X
S-511-1					
PE2	1629.6	1056	288	120	21.6
HAPE	1629.6	1056	288	120	21.6
AIPE	0	0	0	0	0
S-511-4					
PE2	1629.6	1056	288	120	21.6
HAPE	1629.6	1056	288	120	21.6
AIPE	0	0	0	0	0

5. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to Section 4.9 of District Rule 2201, the Pre-project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

The Sycamore facility is part of ChevronTexaco's (formerly Texaco's, formerly Getty's) Heavy Oil Central stationary source consisting of facility ID's S-88, S-511, S-1127, S-1131, and S-1551 because the units are permitted to be used in the production of oil and are owned by ChevronTexaco. This source is a major

source for all pollutants. The pre-project Stationary Source Potential to Emit is estimated as follows (detailed report of each permit unit's contribution can be located in the project file):

Table VII-11. Pre-Project Stationary Source Potential To Emit (SSPE1)

	NO_X	CO	VOC	PM_{10}	SO_X
SSPE1	6828877	4768643	3720199	1600256	7405203

6. Post-Project Stationary Source Potential to Emit (SSPE2)

Pursuant to Section 4.9 of District Rule 2201, the Pre-project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

There is no change in the contribution of permit units to the SSPE. Therefore, SSPE2 equals SSPE1 and is as follows:

Table VII-12. Post-Project Stationary Source Potential To Emit (SSPE2)

	NO_X	CO	VOC	PM_{10}	SO_X
SSPE2	6828877	4768643	3720199	1600256	7405203

7. Major Source Determination

Pursuant to Section 3.25 of District Rule 2201, a major source is a stationary source with post-project emissions or a Post Project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the following threshold values:

Table VII-13. Major Source Determination

Permit Unit	NO_X	CO	VOC	PM_{10}	SO_X
Pre-Project, SSPE1	6828877	4768643	3720199	1600256	7405203
Post-Project, SSPE2	6828877	4768643	3720199	1600256	7405203
Major Source Thresholds	50000	200000	50000	140000	140000
Major Source?	Y	Y	Y	Y	Y

This source is an existing Major Source for all pollutants. No change in other criteria pollutants are proposed or expected as a result of this project.

8. Baseline Emissions (BE)

BE = Pre-project Potential to Emit for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to Section 3.23

NO_x, VOC, PM10 and SOx

Pursuant to Rule 2201, subsection 3.7.1.3, baseline emissions (BE) are equal to the pre-project potential to emit (PE1) for fully offset emission units and for pollutants for which a source is not a major stationary source. As discussed in section VII.C.9 below, except for CO, the Sycamore emission units were fully offset at the time they were originally permitted under the provisions of the then existing Kern County APCD New Source Review Rule 210.1.

Therefore, BE = PE1 for NOx, VOC, PM_{10} and SO_2

CO

For CO emissions, the emission units are not Highly Utilized, Fully Offset, nor Clean; therefore, BE=HAE.

The baseline period is the 2-year period preceding submission of the application. For this project, a baseline period on May 1, 2002 to April 1, 2004 was established based on an application submittal date of June 11, 2004.

Historical actual emissions during the baseline period were obtained from continuous emissions monitoring records available from the facility continuous emissions monitoring system (CEMS). (Due to the volume of records, this data is not included as an attachment, but can be found in the project file).

Table VII-14. Baseline Emissions

Permit Unit	NO_x	CO	VOC	PM_{10}	SO_x
S-511-1-8	594841	65474	105120	43800	4380
S-511-1-8	594841	79344	105120	43800	4380

9. Major Modification/Title I Modification

Rule 2201 defines a Major Modification by referencing 40CFR51.165. A Major Modification as defined in 40CFR51.165 (nonattainment plans and permitting) occurs if the Post-Project Stationary Source Potential to Emit (SSPE2) exceeds the Major Source Thresholds (as defined in Rule 2201) and the net emissions increase, is equal to or greater than one or more of the following threshold values:

Table VII-15. Major Modification Thresholds (lb/yr)

NO_X	CO	VOC	PM_{10}	SO_X
50,000	100,000	50,000	30,000	30,000

As discussed in Section VII.C.7 above, the facility is a Major Source for all pollutants. The project must "result in" a significant increase in emissions in order to trigger a Major Modification.

However, since the Sycamore facility is located in a CO attainment area, and since 40CFR51.165 addresses Major Modifications in nonattainment areas only, this project is not a Major Modification for CO pursuant to 40CFR51.165.

(It is noted that EPA has not delegated Federal Prevention of Significant Deterioration (PSD) permitting requirements under 40CFR52.21 to the District. Sycamore has submitted an application to EPA to address PSD requirements for this project.)

According to the original project evaluation for construction and operation of the Sycamore facility (Authority to Construct issued in July of 1986), all emissions except CO were fully offset for the emissions units within this project. (For CO, modeling was performed which demonstrated that the ambient air quality standards would not be exceeded).

The reductions used to provide the offsets were made prior to adoption of a formal banking rule, and thus were tracked in the form of a cumulative net emissions change for the stationary source. The original project required the shutdown of 62 steam generators when the turbines were operating on natural gas and the shutdown of 68 steam generators when the turbines were operating on fuel oil (KCAPCD #4170001 – 008, operational condition d.) These reductions were applied to the Sycamore project to fully offset the emissions increases for NO_X , PM10 and SO_X emissions and partially offset the emission increase for VOC.. The remaining VOC emission increases were offset through prior VOC emission reductions that had previously accrued to the stationary source balance. CEC conditions of certification Air Quality A. – C. specified that Texaco submit a certificate of dedication for the shutdown of 68 steam generators and that appropriate modifications in the permits for the steam generators be made to ensure that the ERCs are surplus, permanent, quantifiable and enforceable.

Therefore these units qualify as Fully Offset for NO_x, VOC, PM10 and SO_X as the new emissions were fully mitigated under the New Source Review rule.

To calculate the applicability of a Major Modification for these pollutants, the net increase in emissions is based on the change in permitted annual emissions. There is no change in annual permitted emissions with this project. Therefore the net emissions increase is zero and this project is not a Major Modification for any pollutant.

VIII. COMPLIANCE

Rule 1080 *Stack Monitoring* (12/17/92)

This rule allows the APCO to request the installation and use of continuous emissions monitors (CEMs), and specifies performance standards for the equipment and administrative reporting, recordkeeping and violation and equipment breakdown notification requirements. The units are currently equipped with operational CEMs and permit conditions that meet the requirements of this rule.

Rule 1081 *Source Sampling* (12/16/93)

This rule requires adequate and safe facilities for use in sampling to determine compliance and specifies methods and procedures for source testing, sample collection and compliance determination. The existing operating permits already demonstrate compliance with the requirements of this rule for the HRSG stack. Additional stack sampling provisions will need to be installed on the bypass stack. CEMS extraction ports already exist at the bypass stack.

Rule 2201 *New and Modified Stationary Source Review* (12/19/02)

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis for the following*:

a. Any new emissions unit with a potential to emit exceeding two pounds per day,
b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
d. Any new or modified emissions unit, in a stationary source project, which results in a Title I Modification.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

a. New emissions units – PE > 2 lb/day

As discussed in Section I above, there are no new emissions units associated with this project; therefore BACT for new units with PE > 2 lb/day purposes is not triggered.

It is also noted that allowing operation without recovering exhaust heat does not change the class or category of source since these units will retain the physical and operational ability to operate in cogeneration mode.

b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore BACT is not triggered.

c. Modification of emissions units – AIPE > 2 lb/day

AIPE = PE2 – HAPE

Where,
AIPE = Adjusted Increase in Permitted Emissions, (lb/day)
PE2 = Post-Project Potential to Emit, (lb/day)
HAPE = Historically Adjusted Potential to Emit, (lb/day)

HAPE = PE1 x (EF2/EF1)

Where,
PE1 = The emissions unit's Potential to Emit prior to modification or relocation, (lb/day)
EF2 = The emissions unit's permitted emission factor for the pollutant after modification or relocation. If EF2 is greater than EF1 then EF2/EF1 shall be set to 1
EF1 = The emissions unit's permitted emission factor for the pollutant before the modification or relocation

AIPE = PE2 – (PE1 * (EF2 / EF1))

For this project, there is no change in emission factor or potential to emit. Therefore the AIPE is zero. Therefore, BACT is not triggered.

d. Title I Modification

As discussed in Section VII.C.7 above, this project does not constitute a Title I Modification; therefore BACT is not triggered.

B. Offsets

1. Offset Applicability

Pursuant to Section 4.5.3, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the Post-project Stationary Source Potential to Emit (SSPE2) equals to or exceeds the offset threshold levels in Table 4-1 or Rule 2201.

The following table compares the post-project facility-wide annual emissions in order to determine if offsets will be required for this project.

Table VIII-16. Determination of Offset Requirements

	NO_X	CO	VOC	PM_{10}	SO_X
Post-project SSPE (SSPE2)	2381860	1542426	420546	175450	17811
Offset Threshold	20,000	200,000	20,000	29,200	54,750
Greater Than Offset Threshold?	Yes	Yes	Yes	Yes	Yes

2. Quantity of Offsets Required

Pursuant to Rule 2201, subsection 4.7.1, since the Pre-project SSPE is greater that the emission offset thresholds for all pollutants, the SSPE is calculated as the difference between PE2 and Baseline Emissions (BE) for each unit:

Emissions to be offset = PE2 – BE

NO_x, VOC, PM10 and SOx

Pursuant to Rule 2201, subsection 3.7.1.3, baseline emissions (BE) are equal to the pre-project potential to emit (PE1) for fully offset emission units and for pollutants for which a source is not a major stationary source. As discussed in section VII.C.10 above, except for CO, the Sycamore emission units were fully offset at the time they were originally permitted under the provisions of the then existing Kern County APCD New Source Review Rule 210.1.

Therefore, BE = PE1 for NOx, VOC, PM_{10} and SO_2

From the pre and post-project potential to emit analysis above, PE1 = PE2 (see Section VII C.1 and 2., above).

Therefore, BE = PE2 and emissions to be offset for NOx, VOC, PM_{10} and SO_2 = 0

CO

For CO, baseline emissions were obtained from continuous emissions monitoring records available from the facility continuous emissions monitoring system (CEMS). This data is included in the project file. The quantity of offsets required for CO are calculated below.

Table VIII-17. Determination of CO Emission Offset Requirements, lb/yr

	CO
Post-project Potential to Emit (PE2)	770880
Baseline Emissions (S-511-1-8 & S-511-4-8	144818
Required CO Offsets	626062

The applicant has provided an air quality impact analysis demonstrating that post-project CO emissions will not cause or contribute to a violation of the applicable CO ambient air quality standards. District-performed modeling also indicates that post-project CO emissions will not cause or contribute to a violation of the applicable CO ambient air quality standards. Pursuant to Section 4.6.1 of Rule 2201, the project is therefore exempt from CO emission offset requirements. See Attachment C for summary of modeling results.

(Note: The existing permits contain only a 3-hour average for CO, and not a 1-hour average. In order to validate the CO modeling performed by the District within this project, a 1-hour average limit of 200 lb/hr per turbine (estimate to be the worst case) will be added to the permits. The existing 3-hour average for normal operation of 44 lb/hr for CO will continue to be included on the permits as well as the reinstated 3-hour average of 140 lb/hr for startups.)

C. Ambient Air Quality Standards (AAQS)

Ambient air quality modeling has been performed that demonstrates that this project will not cause or make worse a violation of any applicable AAQS. The results of the modeling are summarized in Tables VII-1 and VII-2 below and are detailed in Attachment C.

Table VII-1. ISCST3 Modeling Results

Pollutant	Averaging Period	Maximum Modeled Impact ($\mu g/m^3$)	Background[b] ($\mu g/m^3$)	Total Predicted Concentration ($\mu g/m^3$)	AAQS ($\mu g/m^3$)	% of Standard
Sycamore Impacts - Current						
CO	1-hour	178.9	12,025	12,201	23,000	53.1
	8-hour	31.7	6,161	6,193	10,000	61.9
NO_2	1-hour	174.1	159.9	334.0	470	71.1
	Annual	1.15	30.1	31.3	100	31.3
PM_{10}	24-hour	0.81	166	166.8	50	333.6
	Annual	0.085	50.8	50.9	30	169.7
SO_2	1-hour	0.92	57.6	58.5	655	8.9
	3-hour	0.47	57.6	58.0	1,300	4.5
	24-hour	0.081	22.8	22.9	105	21.8
	Annual	0.0085	8.9	8.9	80	11.1
Sycamore Impacts – After Project						
CO	1-hour	94.3	12,025	12,117	23,000	52.7
	8-hour	21.6	6,161	6,183	10,000	61.8
NO_2	1-hour	103.2	159.9	263.1	470	56.0
	Annual	0.68	30.1	30.8	100	30.8
PM_{10}	24-hour	0.54	166	166.5	50	333.0
	Annual	0.050	50.8	50.9	30	169.7
SO_2	1-hour	0.59	57.6	58.2	655	8.9
	3-hour	0.29	57.6	57.9	1,300	4.5
	24-hour	0.054	22.8	22.9	105	21.8
	Annual	0.0050	8.9	8.9	80	11.1
Cumulative Impacts (Sycamore after Project & KRCC after Project)						
CO	1-hour	143	12,025	12,164	23,000	52.9
	8-hour	40.4	6,161	6,201	10,000	62.0
NO_2	1-hour	164.9	159.9	324.8	470	69.1
	Annual	1.3	30.1	31.4	100	31.6
PM_{10}	24-hour	0.98	166	167	50	334.0
	Annual	0.096	50.8	50.9	30	169.7
SO_2	1-hour	0.98	57.6	58.7	655	8.9
	3-hour	0.44	57.6	58.0	1,300	4.5
	24-hour	0.098	22.8	22.9	105	21.8
	Annual	0.0096	8.9	8.9	80	11.1

a Source: 40 CFR 52.21

b Background represents the maximum value measured at Oildale, 1999-2003, except for SO_2. Values for Oildale were the highest for data collected between 1995-1997.

AAQS = Most stringent ambient air quality standard for the averaging period.

Table VII-2. Fumigation Impact Modeling Results

Pollutant	SCREEN 3 Fumigation 1-hr Results [µg/m³]/[g/s]		Emission Rates (lb/hr)	Maximum Impacts Turbines (µg/m³)	Background Concentrations (µg/m³)	Total Concentrations (µg/m³)	Lowest AAQS (µg/m³)
	Simple Cycle	Cogeneration					
CO 1-hour	0.553	1.518	200/63[1]	74.40	12,025	12,099	23,000
NO_2 1-hour	0.553	1.518	140/79.47[1]	72.51	159.9	232.4	470
SO_2 1-hour	0.553	1.518	0.5	0.38	57.6	57.98	655
SO_2 3-hour	0.553	1.518	0.5	0.38	57.6	57.98	1,300

D. Public Notification

1. Applicability

Public noticing is required for:
a. Any new Major Source, which is a new facility that is also a Major Source,
b. Title I Modifications,
c. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
d. Any project which results in the offset thresholds being surpassed, and/or
e. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

a. New Major Source

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

b. Title I Modification

As demonstrated in VII.C.7, this project does not constitute a Title I Modification; therefore, public noticing for Title I Modification purposes is not required.

c. PE > 100 lb/day

Applications which include a new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. There are no new emissions units associated with this project; therefore public noticing is not required for this project for Potential to Emit Purposes.

d. Offset Threshold

Public notification is required if the Pre-Project Stationary Source Potential to Emit (SSPE1) is increased from a level below the offset threshold to a level exceeding the emissions offset threshold, for any pollutant.

There is no change in SSPE with this project. Therefore offset, thresholds are not being surpassed. Therefore public noticing is not required for offset purposes. (It is noted that this existing source is above offset thresholds for all pollutants.)

e. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a Stationary Source Increase in Permitted Emissions (SSIPE) of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE is calculated as the Post Project Stationary Source Potential to Emit (SSPE2) minus the Pre-Project Stationary Source Potential to Emit (SSPE1), i.e. SSIPE = SSPE2 – SSPE1. The values for SSPE2 and SSPE1 are calculated according to Rule 2201, Sections 4.9 and 4.10, respectively.

There is no change in SSPE with this project. Therefore SSPE2=SSPE1 and the SSIPE is zero. Therefore public noticing for SSIPE purposes is not required.

2. Public Notice Action

As discussed above, this project will not result in emissions, for any criteria pollutant, which would subject the project to any of the noticing requirements listed above. Therefore, public notice will not be required for this project.

D. Daily Emission Limits (DELs)

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.17 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. Per Sections 3.17.1 and 3.17.2, the DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

The existing PTO contains explicit DELs, validated by the use of continuous emission monitors for NO_x and CO, and fuel use monitoring for SOx. These same conditions will be carried onto the ATCs issued with this project. No further conditions are necessary.

E. Compliance Assurance

1. Source Testing

The gas turbine engines are required to be source tested annually for NO_x and CO, and fuel sulfur content per Rule 2201 and Rule 4703, and once per 5-year permit term for PM10. No change in source testing will occur with this project as there is no change in emission control systems or change in permitted emission rates.

2. Monitoring

NO_x and CO emissions are monitored by the use of continuous emissions monitors. This monitoring satisfies Rule 2201 and Rule 4703 requirements. No additional monitoring is proposed or required.

3. Recordkeeping

Sycamore is required to maintain records of emissions, source test results, CEM operations, etc. No changes are proposed or required.

4. Reporting

Sycamore is required to report deviations, CEM breakdowns, equipment breakdowns, and other malfunctions. No changes are proposed or required.

Rule 2520 *Federally Mandated Operating Permits (06/21/2001)*

Sycamore has received their initial Title V Permit and is subject to this rule. This project qualifies as a minor modification to the Title V permit.

Sycamore has requested to have the ATC issued with a Certificate of Conformity (COC), and a copy of Sycamore Compliance Certification is provided in Attachment B. A 45-day EPA project review period is required. Compliance with this rule is expected.

Rule 2540 *Acid Rain Program (11/13/97)*

The existing units are exempt (are not "affected units") from the acid rain program pursuant to 40 CFR 72.6 (b)(1) because they are considered "simple combustion turbines that commenced commercial operation before November 15, 1990. " The definition of "simple combustion turbine" is provided in 40 CFR 72.2 as follows:

> *"Simple combustion turbine* means a unit that is a rotary engine driven by a gas under pressure that is created by the combustion of any fuel. This term includes combined cycle units without auxiliary firing. This term excludes combined cycle units with auxiliary firing, unless the unit did not use the auxiliary firing from 1985 through 1987 and does not use auxiliary firing at any time after November 15, 1990."

There is no definition of "combined cycle unit" in 40 CFR 72.2. However, EPA guidance issued by the Acid Rain Division "Do Acid Rain SO2 Regulations Apply To You", EPA/430-R-94-002 (1994) defines "combined cycle unit" on page 10 as follows:

> "In a combustion turbine, air heated from the combustion of fuel causes a turbine to spin in a magnetic field., which, in turn, creates electricity. If the hot air exiting the turbine is captured through as heat recovery steam generator or waste heat boiler, the turbine is considered a combined cycle unit"

Since "simple combustion turbine" definition includes the combined cycle units without auxiliary firing, Sycamore is considered a combined cycle unit without auxiliary firing and is therefore exempt under the provisions of 40 CFR 72.6 (b) (1). The units will continue to be considered "simple combustion turbines" when converted from cogeneration to simple cycle mode and Sycamore will continue to be exempt from Rule 2540. Compliance is expected.

Rule 4001 *NSPS Subpart GG – Standards of Performance for Stationary Gas Turbines (04/14/99)*

The turbines are subject to Subpart GG, which limits oxides of nitrogen and sulfur from stationary gas turbines. The current operating permits include NOx and SOx limits that meet the standards of Subpart GG. These operating permit limits will not be changed. Also, reporting and notification requirements specified in Subpart A are also contained in the current operating permits.

Rule 4101 *Visible Emissions (12/17/92)*

The current permit unit requirements limit visible emissions greater than 20% opacity (No. 1 Ringelmann) to periods less than three minutes in any one hour period. Continued compliance is expected.

Rule 4102 *Nuisance (12/17/92)*

The current facility has not generated any nuisance complaints. Operation of the turbines without recovering exhaust heat is not expected to result in any nuisance complaints. Continued compliance is expected.

A. California Health & Safety Code 41700

Pursuant to District's Risk Management Policy APR 1905, for any sources with increases in hazardous air pollutant (HAP) emissions, the health risks resulting from such projects must be evaluated. The health risk assessment (HRA) process begins with the calculation of a "prioritization score" using CAPCOA Facility Prioritization Guidelines. If the facility-wide prioritization score is ≤ 1.0, then the project is approvable without further analysis of the health risks.

There is no change in HAP emissions with this project. However, because the bypass stack has different dimensions that the HRSG stack, and since the exhaust gas temperature will be different, the existing prioritization score was determined to see if further risk screening was necessary. This project has a prioritization score of 0.52; therefore, no further screening is required. See Attachment C for summary of results.

B. Discussion of T-BACT

Since the prioritization score is less than 1, T-BACT is not required.

Rule 4201 *Particulate Matter Concentration (12/17/92)*

Rule 4201 limits PM emissions from any source operation to less than 0.1 gr/dscf. The current operating permit limits PM emissions to less than 0.0072 gr/scf at 12% CO2 for each turbine. The proposed modifications will not alter this limit and continued compliance is expected.

Rule 4301 *Fuel Burning Equipment (12/17/92)*

Section 3.1 defines fuel burning equipment as "any furnace, boiler, apparatus, stack, and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer". The CTGs primarily produce power via mechanical means where the combustions gas is passed across the turbine blades to drive the turbine shaft, which, in turn, drives an electrical generator shaft to produce electricity. Because mechanical means are primarily used to produce electricity, the CTGs do not meet the definition of fuel burning equipment and this rule does not apply.

Rule 4703 *Stationary Gas Turbines (04/25/02)*

This rule limits NOx and CO emissions from stationary gas turbines. The Sycamore turbines are currently in compliance with the emission limits and monitoring requirements of this rule. Future requirements include lowering of the NO_x limit to 3 ppmv @ 15% O_2 per the Enhanced option. Sycamore has submitted a compliance plan stating that they will comply with the Enhanced Option by 2008 or at the first overhaul, as required by the rule. Compliance is expected.

Rule 4801 *Sulfur Compounds (12/17/92)*

Rule 4801 limits sulfur compound emission to 0.2% (2,000 ppm) dry volume. SOx emissions from the turbines are based on combusting natural gas with a fuel sulfur content limited by the operating permit at 0.3 gr/100 scf. This fuel S content (assuming 1020 Btu/scf, LHV) results in a SOx emission concentration of approximately 0.2 ppmvd @ 15% O2. This is in compliance with the 2,000 ppm limit.

IX. RECOMMENDATION

Issue preliminary decision to approve project and publish preliminary decision. After 45-day EPA comment period, issue ATCs. See Attachment D for ATC conditions.

In addition to the proposed changes described in this document, a few other existing permit conditions will be reorganized and reworded to clarify requirements.

X. BILLING INFORMATION

Application filing fees have been received.

No change in annual fees result with this project.

Permit Number	Fee Schedule	Fee Rating	Annual Fee
S-511-1-9	3020-8B-A	75,000 kW	$ 8757
S-511-2-9	3020-8B-A	75,000 kW	$ 8757
S-511-3-9	3020-8B-A	75,000 kW	$ 8757
S-511-4-9	3020-8B-A	75,000 kW	$ 8757

Appendixes

A: Current PTO(s)
B: Compliance Certification
C: HRA Memo
D: Draft ATC(s)
E: Emission Profile(s)

Attachment A

Current Permits to Operate
Equipment Description and Conditions

S-511-1-9: 75 MW SYCAMORE COGENERATION UNIT #1
S-511-2-9: 75 MW SYCAMORE COGENERATION UNIT #2
S-511-3-9: 75 MW SYCAMORE COGENERATION UNIT #3
S-511-4-9: 75 MW SYCAMORE COGENERATION UNIT #4

All units have the same permit conditions

1. CGT Shall be fired on natural gas only. There shall be no provisions for oil firing. Natural gas used as fuel shall be pipeline quality with sulfur content of 0.3 gr/100 scf or less (0.001% sulfur by weight). [District NSR Rule; 40 CFR 60.333(a); Kern County Rule 407] Y

2. Operator shall not exceed a NOx emission rate of: (15 X EFF/25)ppmvd @ 15% O2, under load conditions, excluding thermal stabilization and reduced load periods, where EFF (efficiency) is the higher of EFF1 {100%x(3412 Btu/kW-hr)/(Actual Heat Rate at HHV, Btu/kW-hr)} or EFF2 {EFFmfr x (LHV/HHV)} where actual heat rate is a ratio of the heat input to power output taking into account the manufacturer's listed turbine efficiency, HHV is the higher heating value of the fuel, LHV is the lower heating value of the fuel, and EFFmfr is the manufacturer's continuous rated percent efficiency of the gas turbine with air pollution equipment at LHV. An EFF that is less than 25 shall be assigned a value of 25. [40 CFR 60.332(a)(1) & 60.332(a)(2) and District Rule 4703, 5.1.1] Y

3. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [Rule 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), Rule 110 (Madera), and Rule 108 (Kings); District Rule 1081] Y

4. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072-80, D 3031-81, D 4084-82 or D 3246-81. [40 CFR 60.335(d)] Y

5. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(b)(2)] Y

6. The HHV and LHV of the fuel shall be determined using ASTM D3588-91, ASTM 1826-88, OR ASTM 1945-81. [40 CFR 60.332(a),(b)] Y

7. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E or 20, and oxygen (O2) concentrations shall be determined using EPA Method 3, 3A, or 20. [40 CFR 60.335(b) and District Rule 4703, 6.4] Y

8. The operator shall provide source test information annually regarding the exhaust gas NOx concentration corrected to 15% O2 (dry). [40 CFR 60.332(a),(b) and District Rule 4703, 5.1] Y

9. The operator shall provide source test information annually regarding the demonstrated percent efficiency (EFF) as defined in District Rule 4703, 5.1.1. [40 CFR 60.332(a),(b) and 4703, 5.1.1] Y

10. Nitrogen oxides (NOx) and oxygen (O2) concentrations shall be determined using EPA Method 20. The span values shall be 300 ppm NOx and 21 percent O2. [40 CFR 60.335 (c)(2),(3)] Y

11. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a NOx performance test nor shall NOx emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)] Y

12. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.1.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera); District Rule 1080, 7.2] Y

13. Records shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEM's that have been installed pursuant to District Rule 1080, and emission measurements. [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera); District Rule 1080, 7.3 and 40 CFR 60.7(b)] Y

14. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.4.2] Y

15. The operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Y

16. Results of continuous emission monitoring must be averaged in accordance with the requirements of 40 CFR 60.13. [40 CFR 60.334(b),(c) and District Rule 4703, 5.0] Y

17. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(b); District Rules 2520, 9.4.2 and 4703, 6.2.4; PSD SJ 85-09, X.D.1] Y

18. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Kern, Kings, Merced, San Joaquin, Stanislaus, Tulare); Rule 108.1 (Kings) and Rule 108 (in all seven remaining counties in the San Joaquin Valley); Rule 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern and Stanislaus), and 110 (Madera); District Rule 4703, Section 6.2.2; District Rule 1080, 7.3; 40 CFR 60.333(a) and (b); 40 CFR 60.334 (b) and (c)(1). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Y

19. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: Rules 404 (Madera), 406 (Fresno), 407 (Kings, Merced, San Joaquin, Stanislaus, Tulare, Kern); District Rule 1081, 4201, 1080, Section 6.5, 7.2, 8.0, 9.0, and 10.0; 40 CFR 60.332(c) and (d); 60.334 (b), (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Y

20. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: District Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, and 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Y

21. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following subsumed requirements: Rule 404 (Merced); 40 CFR 60.332 (b); 60.335(a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Y

22. Operator shall install, operate, and maintain in calibration a system which continuously measures and records control system operating parameters, elapsed time of operation, and exhaust gas NOx concentration and O2 or CO2 concentration. [40 CFR 60.334(b),(c) and District Rules 2520, 9.4.2 and 4703] Y

23. The continuous NOx monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District,the ARB, and the EPA. [Rule 108 (Kings, Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera) and District Rule 1080, 6.7] Y

24. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)] Y

25. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera) and District Rule 1080, 9.0] Y

26. The APCO shall be notified no later than eight hours after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera) and District Rule 1080, 10.0; PSD SJ 85-09, X.D.3] Y

27. Operators of CEM's installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO and EPA. The report is due on the 30th day following the end of the calendar quarter and shall include: A. time intervals, data and magnitude of excess emissions (computed in accordance with 40 CFR 60.13(h)), nature and cause of excess (if known), corrective actions taken and preventive measures adopted; B. averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard. [Kern County Rule 108 and District Rule 1080, 8.0 and PSD SJ 85-09, X.D.3] Y

28. The written report for each calendar quarter shall also include: C. applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; D. a negative declaration when no excess emissions occurred. Excess emissions shall be defined as any 3-hour period during which the average emissions for CO, as measured by the CEM system, exceeds the emission limit set forth in PSD SJ 85-09, X.E. [Kern County Rule 108; District Rule 1080, 8.0; PSD SJ 84- 01, X.D.3 and X.D.5.a through e] Y

29. The CGT combustors shall be a dry low NOx design capable of achieving 16.4 ppm or lower at 15% O2. [District Rule 4703 and PSD SJ 85-09, X.B] Y

30. Each CGT shall have a maximum heat input rate of 1020 MMBTU/hr on an LHV basis. Firing rate can be increased upon District witnessed emission sampling demonstration that compliance with emission sampling limits can be achieved at higher fuel rates. [District NSR Rule] Y

31. Permit unit shall include one unfired heat recovery steam generator (HRSG) for gas turbine engine assembly with rated steam output of 450,000 lb/hr at 80% quality steam production. [District NSR Rule] Y

32. Exhaust gas ducting from CGT's through HRSG's to the atmosphere shall be gas-tight. [District NSR Rule] Y

33. Bypass stack valve preceding each HRSG shall be designed to be gas-tight. [District NSR Rule] Y

34. Each CGT shall have a fuel consumption monitor/recorder. [District NSR Rule and PSD SJ 85-09, X.D.1] Y

35. Exhaust gas particulate matter concentration shall not exceed 0.0072 gr/scf calculated at 12% CO2. [District NSR Rule] Y

36. Each HRSG exhaust stack shall be equipped with permanent stack sampling provisions consistent with District Rule 1081, EPA reference Methods 5 and 8 and OSHA requirements. [District Rule 1081] Y

37. Operational records (including but not limited to: fuel characteristics, etc.) shall be maintained by Sycamore Cogeneration Company. [District NSR Rule] Y

38. This facility shall operate as a cogeneration facility pursuant to Public Resources Code Section 25134 for thermally enhanced oil recovery operations unless prior District approval is granted to operate otherwise. [District NSR Rule] Y

39. Accurate records of NOx (as NO2) and carbon monoxide (CO) flue gas concentrations corrected to 15% O2, dry and CGT fuel sulfur content shall be maintained and shall be reported as described by District Rule 1080 and upon request. [District Rule 1080] Y

40. The limit for NOx, except during the conditions of startup and shutdown, shall be 16.4 ppmv at 15%02 as NO2 (3hr avg), 67.9 lb/hr (3hr avg) (1629.6 lb/dy) as NO2 and 79.7 lb/hr as NO2 (max 1hr avg). [District Rules 4703 and NSR] Y

41. The limit for CO shall be 25 ppmv at 15% O2 (3-hr avg) or 44.0 lb/hr(3hr avg.)(1056 lb/dy). [District Rule 4703 and PSD SJ 85-09, X.E] Y

42. Daily Emissions for the unit may be determined from the arithmetic mean of three, 40-minute test runs for NOx and CO, multiplied by the appropriate factor. [District Rule 2520, 9.4.2 and District Rule 4703] Y

43. Source testing to determine NOx and CO emissions and fuel gas sulfur content shall be conducted annually. [District Rule 1081] Y

44. Annual compliance tests shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1081] Y

45. Continuous emission monitoring system for NOx as NO2 and continuous monitoring system for CO & CO2 shall serve each CGT flue gas stream, shall conform to SJVUAPCD Rule 1080 specifications, shall meet EPA monitoring performance specifications, & shall be operational whenever the turbine is in operation. [District Rule 1080 and PSD SJ 85-09, X.D.1 and .2] Y

46. All continuous emissions monitoring systems shall be calibrated and operated according to EPA guidelines as specified in 40 CFR 60, Appendix B and 40 CFR 52, Appendix E. CEM ppm and lb/hr shall be calculated as a three-hour and a 1-hour average. [District Rule 1080 and PSD SJ 85-09 X.D.2] Y

47. Each 1-hour period in a 3-hour average will commence on the hour. The 3-hour average will be compiled from the three most recent 1-hour periods. [District Rule 1080] Y

48. Quarterly continuous emission monitoring system reports shall be submitted to the District, EPA and CEC, as required by EPA regulations as specified in CFR Title 40, Part 58, Appendix B and Part 60 Appendix B. [District Rule 1080 and PSD SJ 85-09, X.D.5] Y

49. Audits of continuous emission monitoring system shall be conducted in accordance with EPA guidelines, witnessed at the District's discretion, and reports shall be submitted to the District within 60 days of such an audit. [District Rule 1080 and PSD SJ 85-09, X.D.3] Y

50. The Relative Accuracy Audit shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1080 and PSD SJ 85-09, X.D.3] Y

51. During hours of CGT startup or shutdown, emissions shall not exceed 140.0 lb/hr of NOx averaged over a two (2) hour period and shall not exceed 1629.6 lb NOx/day. [District NSR Rule] Y

52. Startup and shutdown of CGT, as defined in 40 CFR, Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [40 CFR 60.8] Y

53. NO2 and CO daily emissions during days of startup/shutdown shall be calculated from natural gas combustion rates and CEM results. [District Rule 1080] Y

54. Daily records of NO2 and CO emission calculations during days of gas turbine startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1080] Y

55. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 85-09] Y

56. The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in CO emissions above any allowable emissions limit stated in this permit. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. [PSD SJ 85-09] Y

57. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the conditions of this permit, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 85-09] Y

58. The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations. [PSD SJ 85-09] Y

59. Any requirements established by this permit for the gathering and reporting of information are not subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act (PRA) because this permit is not an "information collection request" within the meaning of 44 U.S.C. Subsections 3502(4) & (11), 3507, 3512, and 3518. Furthermore, this permit and any information gathering and reporting requirements established by this permit are exempt from OMB review under the PRA because it is directed to fewer than ten persons. [44 U.S.C. Section 3502(4), (11) and 5 CFR Section 1320.5(a) and PSD SJ 85-09] Y

60. At such times as specified by the USEPA, permittee shall conduct or cause to be conducted performance tests (as described in 40 CFR 60.8) for CO on the exhaust stack gasses and furnish the District, the California ARB and the USEPA a written report of the results of such tests. All performance tests shall be conducted on an annual basis and at the maximum operating capacity of the emissions unit being tested. Upon written request from permittee, and adequate justification, USEPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity. [PSD SJ 85-09] Y

61. Performance tests for the emissions of CO shall be conducted and results reported in accordance with the test methods set forth in 40 CFR 60.8 and 40 CFR 60, Appendix A. The performance tests for the emissions of CO shall be conducted using EPA Methods 1 through 4 and 10 [PSD SJ 85-09] Y

62. The USEPA shall be notified in writing at least 30 days in advance of such test to allow time for development of an approvable performance test plan and to arrange for an observer to be present at the test. Such prior approval shall minimize the possibility of USEPA rejection of test results for procedural deficiencies. In lieu of the above mentioned test methods, equivalent methods may be used with prior written approval from the USEPA. [PSD SJ 85-09] Y

63. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit. [PSD SJ 85-09] Y

64. For performance test purposes, sampling ports, platforms, and access shall be provided by the facility on the emission unit exhaust system in accordance with 40 CFR 60.8(e). [PSD SJ 85-09] Y

65. The cogeneration facility is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60). The owner or operator shall meet all applicable requirements of Subparts A and GG of this regulation. [PSD SJ 85-09] Y

66. All correspondence as required by the PSD permit shall be forwarded to: a) Director, Enforcement Div (Attn: A-5), EPA Region IX, 75 Hawthorne Street, San Francisco, CA, 94105; b) Chief, Stationary Source Control Division, California Air Resource Board, P.O. Box 2815, Sacramento, CA, 95814; and c) Compliance Division, SJVUAPCD. [PSD SJ 85-09] Y

67. Maximum emission rates, except during conditions of startup and shutdown, shall not exceed: PM10, 5.0 lb/hr; SOx, 0.5 lb/hr as SO2, 0.6 lb/hr as SO4; VOC's, 12.0 lb/hr. [District NSR Rule] Y

68. The operator shall perform source testing for PM10 concentration and emission rate once per permit term using EPA Method 5. [40 CFR 60.8 (b) and (c)] Y

Attachment B

Compliance Certification

San Joaquin Valley
Unified Air Pollution Control District

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

[ ] SIGNIFICANT PERMIT MODIFICATION
[X] MINOR PERMIT MODIFICATION
[ ] ADMINISTRATIVE AMENDMENT

COMPANY NAME: **Sycamore Cogeneration Company**	FACILITY ID: **S – 511**
1. Type of Organization:[ ] Corporation [ ] Sole Ownership [ ] Government [X] Partnership [ ] Utility	
2. Owner's Name: **Sycamore Cogeneration Company**	
3. Agent to the Owner: **Neil Burgess**	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial **all** circles for confirmation):

(NEB) Based on information and belief formed after reasonable inquiry, the source identified in this application will continue to comply with the applicable federal requirement(s).

(NEB) Based on information and belief formed after reasonable inquiry, the source identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.

(NEB) Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.

(NEB) Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

N. E. Burgess
Signature of Responsible Official

July 29, 2004
Date

Neil E. Burgess
Name of Responsible Official (please print)

Executive Director
Title of Responsible Official (please print)

Attachment C

Air Quality Modeling Results

Overview

The purpose of the air dispersion modeling analysis is to demonstrate that air emissions from the proposed modification at the Sycamore Cogeneration Company (Sycamore) facility will not cause or contribute to an exceedance of any state or federal ambient air quality standards (AAQS). The modeling addresses emissions at Sycamore, two units in proposed simple cycle mode and two units in the existing cogeneration mode. For short-term (1-hour average) modeling for NO_2 and CO, it was assumed a single turbine would be operating in start-up mode with the remaining three turbines operating at normal operating conditions. In addition, a cumulative analysis has been performed that includes the four units located at the nearby KRCC plant (two operating as cogeneration units and two operating at simple cycle conditions). The KRCC units were assumed to be operating under normal operating conditions. Separate modeling analyses were performed to include the Sycamore Cogeneration facility exclusively, and cumulatively, including both Sycamore and KRCC.

Model and Model Options

The modeling was conducted using the most recent version of the U.S. EPA's Industrial Source Complex Short Term 3(ISCST3) model, Version 02035. ISCST3 is a Gaussian dispersion model capable of assessing impacts from a variety or sources in regions of simple, intermediate, and complex terrain. The model is capable of estimating concentrations from a wide range of averaging times (from one hour to one year or more).

Inputs required by the ISCST3 model include the following:

- Model Options
- Meteorological data
- Receptor data
- Source data.

Model options refer to user selections that account for conditions specific to the area being modeled or to the emissions source that needs to be examined. The model provides US Environmental Protection Agency (USEPA) recommended default options for the user. With the exception of the "Missing data processing routine," the USEPA regulatory default options were used for this analysis. They include:

- Final plume rise at all receptors;
- Stack-tip downwash;
- Buoyancy-induced dispersion;
- Calms processing;
- Missing data processing routine;
- Default wind profile exponents;
- Default vertical potential temperature gradients; and
- Rural dispersion coefficients.

Building Wake Effects

To determine whether or not a structure (building) potentially affects pollutant dispersion from a nearby emissions source, the EPA provides specific guidance (USEPA 1985). Direction-specific building data were generated for stacks below good engineering practice (GEP) stack height using U.S. EPA's Building Profile Input Program (BPIP) (Version 04112 [U.S. EPA, 1995c]). The turbines, HRSGs, inlet air filters and evaporative cooler structures were included in the analysis for both the Sycamore and KRCC sites. The results of the BPIP analysis were included in the ISCST3 input files to assess downwash effects. The ISCST3 model considers direction-specific downwash using both the Huber-Snyder and Schulman-Scire algorithms. Input and output files for the BPIP analysis are attached.

Meteorological Data

ISCST3 ready meteorological data used in the analysis was obtained from the SJVUAPCD website. Five years of data, 1986-1990, from Bakersfield - Meadows Field (Station # 23155) was used in the analysis. These data sets have a number of missing hours where data was not gathered. These data gaps generally occur during nighttime hours. Because of these data gaps, the missing data processing routine was used in the ISCST3 analysis.

Receptor Locations

Receptors were placed at off-site locations to evaluate the impacts of the Sycamore Cogeneration project and the cumulative impacts of Sycamore and KRCC. The selected receptor spacing varies according to distance from the project area. Receptor spacing was closest at the property boundary and increased with distance from the boundary. Receptors were placed out to 10 kilometers (km) from the property boundary. The following receptor spacing was used in the modeling analysis:

- 25-meter spacing along the property line and extending from the property line out to 100 meters;
- 100-meter spacing within 100 m - 1 km of the facility;
- 250-meter spacing within 1 to 10 km of the facility;

The receptor locations were designated using Universal Transverse Mercator (UTM) coordinates. Receptor elevations were obtained from United States Geological Survey (USGS) 7.5-minute electronic data.

Emission Rates and Stack Parameters

Emission rates were developed based on current operating permit limits for normal operation, startups and shutdowns. Short-term (1-hour) for CO and NO_2 modeling was performed assuming one turbine was operating in start-up mode and the remaining turbines were assumed to operate under normal conditions. Startup and shutdown emissions were incorporated as part of the 8-hour and annual scenario for CO and NO_2, respectively. Because emissions are not changing, the same emission rates are used for pre- and post- project sources, including simple cycle and cogeneration units. The Sycamore facility cogeneration units are identical to those at KRCC, therefore, the emission rates for normal operations used for Sycamore in the cumulative analysis are

also the same as those used at KRCC. Table 1 provides a summary of the emission rates used in the modeling analysis.

Table 1. Modeling Emission Rates

Emission Rates (g/s)	NOx	CO	SO2	PM10	Comments
1-hr and 3-hr [1]	17.64	25.20	6.30E-02		Startup emission rate
1-hr[2]	10.04	7.94	6.30E-02		Hourly limit
8-hr	--	8.57	6.30E-02		6 hr of normal operation/(2) 0.5 hr starts/(2) 0.5 hr stops
24-hr	--	--	6.30E-02	6.30E-01	same as 1-hr
Annual	8.56	--	6.30E-02	6.30E-01	daily maximum for 365 days

[1] One turbine assumed to be operating in start-up mode.
[2] Three turbines assumed to be operating under normal operating conditions.

Stack parameters for the existing cogeneration units were based on the source test information supplied by Sycamore staff (URS 2004). The KRCC units were assumed to have identical stack parameters as the Sycamore cogeneration units. The simple cycle unit stack parameters were based on an estimated stack gas temperature and the same mass flow rate of exit gas that was used for the cogeneration units. A summary of the simple cycle and cogeneration unit stack parameters is provided in Table 2.

Table 2. Summary of Simple Cycle and Cogeneration Stack Parameters

Source	Stack Height (ft)	Temperature (F)	Exit Velocity (ft/s)	Stack Diameter (ft)
Simple Cycle	46.73	1025	98.13	17.625
Cogeneration	65.58	295	77.66	14.11

Fumigation Analysis

Fumigation occurs when a plume that was originally emitted into a stable layer of air is mixed rapidly to ground level when unstable air below the plume reaches plume level. Fumigation can cause very high ground-level concentrations. Fumigation can occur during the break up of the nocturnal radiation inversion by solar warming of the ground surface (inversion break-up fumigation). Such conditions are short-lived and are typically compared only with 1-hour standards. A fumigation analysis was performed using the U.S. EPA SCREEN3 model (Version 96043) for a simple cycle stack and a cogeneration stack. A 1 g/s emission rate was used to develop a normalized concentration impact (units of [µg/m^3]/[g/s]) for each stack type. The result was multiplied by the hourly emission rate for each pollutant in units of g/s to calculate the fumigation concentration for each pollutant. SCREEN3 output for the fumigation analysis are attached.

Existing Air Quality

The project site is located in the Kern River oilfield near the center of, and just south of the north boundary section 31, Township 28 South, Range 28 East in Kern County, near Bakersfield, in the San Joaquin Valley Air Basin. The monitoring station closest to the facility for most pollutants is the Oildale - 3311 Manor Street station. This monitoring station is located approximately 7 miles to the east of the project site. However, this station does not measure all criteria pollutant concentrations, and data from other stations are necessary. Monitoring stations in Bakersfield located at Golden State Highway, 5558 California Avenue and 410 E. Planz Road are the next closest monitoring locations that are located near the facility and were used as necessary to supplement data from the Manor Street Station. Gaseous pollutants monitored at these stations include ozone, carbon monoxide, nitrogen oxides, sulfur dioxide, PM_{10} and $PM_{2.5}$.

Air quality measurements taken at these stations are presented in Tables 3 through 8. For the air quality impact analysis, the maximum background concentration from 1999 to 2003 from the Oildale station was used, where available. Background SO_2 concentrations from 1995 – 1997 collected at the Oildale monitoring station were used. SO_2 concentrations are no longer collected at this station. However, these data better represent conditions at Sycamore.

Table 3. Ambient Ozone Levels near Bakersfield, 1999-2003 (ppm)

	1999	2000	2001	2002	2003
Oildale - 3311 Manor Street					
Maximum 1-Hour Average	0.104	0.124	**0.124**	0.112	0.119
Number of Days Exceeding California 1-Hour Standard (0.09 ppm)	16	31	28	29	39
Number of Days Exceeding Federal 1-Hour Standard (0.12 ppm)	0	0	0	0	0
Maximum 8-Hour Average	0.095	0.107	**0.111**	0.104	0.104
Number of Days Exceeding Federal 8-Hour Standard (0.08 ppm) [a]	28	36	35	37	49
Bakersfield – Golden State Highway					
Maximum 1-Hour Average	0.118	0.117	0.125	0.117	0.120
Number of Days Exceeding California 1-Hour Standard (0.09 ppm)	26	28	26	29	35
Number of Days Exceeding Federal 1-Hour Standard (0.12 ppm)	0	0	1	0	0
Maximum 8-Hour Average	0.099	0.101	0.107	0.105	0.102
Number of Days Exceeding Federal 8-Hour Standard (0.08 ppm) [a]	26	30	27	29	40
Bakersfield - 5558 California Avenue					
Maximum 1-Hour Average	0.116	0.125	0.129	0.119	0.120
Number of Days Exceeding California 1-Hour Standard (0.09 ppm)	44	41	46	28	44
Number of Days Exceeding Federal 1-Hour Standard (0.12 ppm)	0	1	1	0	0
Maximum 8-Hour Average	0.101	0.106	0.115	0.105	0.106
Number of Days Exceeding Federal 8-Hour Standard (0.08 ppm) [a]	47	40	47	35	35

Note 1: The most representative maximum average values occurring during the past five years are indicated in bold.

a Number of days with an 8-hour average exceeding federal standard concentration of 0.08 ppm. Regulatory standard is to maintain 0.08 ppm as a 3-year average of the fourth-highest daily maximum. Therefore, number of days exceeding standard concentration is not the number of violations of the standard for the year.

Source: CARB, 2004 California Air Quality Data Statistics. (http:\\www.arb.ca.gov).

ppm = parts per million

Table 4. Ambient PM10, Particulate Levels <10 µm, near Bakersfield, 1999-20023(µg/m^3)

	1999	2000	2001	2002	2003
Oildale - 3311 Manor Street					
Maximum State 24-Hour Average	**166**	127	165	96	104
Maximum Federal 24-Hour Average	156	122	158	93	93
State Annual Average[b]	**50.8**	40.8	47.7	46.7	43.2
Federal Annual Average[c]	--	40.8	47.6	46.2	42.8
Estimated Number of Days Exceeding California 24-Hour Standard (50 µg/m^3)[a]	104.6	73.6	132.6	128.1	121.4
Estimated Number of Days exceeding Federal Standard (150 µg/m^3)[a]	8.2	0	6.0	0	0
Bakersfield - Golden State Highway					
Maximum State 24-Hour Average	186	153	216	194	134
Maximum Federal 24-Hour Average	183	145	205	189	105
State Annual Average[b]	60.1	53.1	--	59.9	52.3
Federal Annual Average[c]	59.5	53.1	--	59.2	52.4
Estimated Number of Days Exceeding California 24-Hour Standard (50 µg/m^3)[a]	172.9	157.6	--	255.8	167.2
Estimated Number of Days Exceeding Federal Standard (150 µg/m^3)[a]	6.1	0	--	6.1	0
Bakersfield - 5558 California Avenue					
Maximum State 24-Hour Average	145	147	204	134	116
Maximum Federal 24-Hour Average	143	140	190	100	110
State Annual Average[b]	48.5	47.8	51.3	50.5	47.7
Federal Annual Average[c]	47.6	45.9	47.7	49	47.7
Estimated Number of Days Exceeding California 24-Hour Standard (50 µg/m^3)[a]	114.6	100.7	119.6	176.9	160.1
Estimated Number of Days exceeding Federal Standard (150 µg/m^3)[a]	0	0	9.0	0	0

Note: Most representative maximum average values occurring during the past five years are indicated in bold.
[a] Measurements are typically collected every six days. Values reported are estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.
[b] All annual mean concentrations are above the California PM_{10} ambient air quality standard of 30 µg/m^3.
[c] In some cases, the federal annual standard has been exceeded.
Source: CARB, 2004 California Air Quality Data Statistics. (http:\\www.arb.ca.gov).
-- = Data not available
µg/m^3 = micrograms per cubic meter
µm = micrometer

Table 5. Ambient PM2.5, Particulate Levels <2.5 µm, near Bakersfield, 1999-2003 (µg/m^3)

	1999	2000	2001	2002	2003
Bakersfield - Golden State Highway					
Maximum State 24-Hour Average	133.9	108.1	120.4	85	67.8
Maximum Federal 24-Hour Average	133.9	108.1	120.4	85	67.8
Estimated Number of Days exceeding Federal Standard (65 µg/m^3)[a]	11	9	6	5	1
98th Percentile	95.3	93.9	95.9	80.4	51.9
National Annual Average	26.2	22.6	21.8	24.1	--
State Annual Average	--	22.6	--	24.1	--
Bakersfield - 5558 California Avenue					
Maximum State 24-Hour Average	134.8	112.7	**154.7**	104.3	84.5
Maximum Federal 24-Hour Average	134.8	112.7	154.7	89.6	59.3
Estimated Number of Days exceeding Federal Standard (65 µg/m^3)[a]	28	19	19	14	14
98th Percentile	111.3	95.4	94.9	73	--
National Annual Average	26.8	22	21.2	22.8	--
State Annual Average	**31.2**	22	--	22.8	--
Bakersfield -- 410 E Planz Road					
Maximum State 24-Hour Average	--	91	114.2	76.4	51.9
Maximum Federal 24-Hour Average	--	91	114.2	76.4	51.9
Estimated Number of Days exceeding Federal Standard (65 µg/m^3)[a]	--	6	6	3	0
98th Percentile	--	76.5	90.6	66.8	47.3
National Annual Average	--	20.3	20.8	23.6	--
State Annual Average	--	N/A	20.8	23.6	--

Note: Maximum average values occurring during the past five years are indicated in bold.

[a] Measurements are typically collected everyday, every three days, or every six days. Values reported are estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

Source: CARB, 2004 California Air Quality Data Statistics. (http:\\www.arb.ca.gov).

-- = Data not available

µg/m^3 = micrograms per cubic meter

µm = micrometer

Table 6. Ambient Carbon Monoxide Levels near Bakersfield, 1999-2003 (ppm)

	1999	2000	2001	2002	2003
Bakersfield - Golden State Highway*					
Maximum 1-Hour Average[a]	**10.5**	10.1	5.7	4.5	4.5
Maximum 8-Hour Average[b]	5	**5.38**	3.49	2.5	3.06
Bakersfield - 5558 California Avenue					
Maximum 1-Hour Average[a]	5.8	6.9	5.8	4.4	3.1
Maximum 8-Hour Average[b]	4.51	4.89	3.41	2.51	2.29

Note: Maximum average values occurring during the past five years are indicated in bold.
*1998 Data from the Golden State Highway Station had not good coverage (only 55%)
[a] All 1-hour concentrations are below the California CO ambient air quality standard of 20 ppm and the federal CO ambient air quality standard of 35 ppm.
[b] 8-hour concentrations are below the California and federal CO ambient air quality standards of 9.0 ppm.
Source: CARB, 2004 California Air Quality Data Statistics. (http:\\www.arb.ca.gov).
-- = Data not available
ppm = parts per million

Table 7. Ambient Nitrogen Dioxide Levels near Bakersfield, 1999-2003 (ppm)

	1999	2000	2001	2002	2003
Oildale - 3311 Manor Street					
Maximum 1-Hour Average [a]	0.08	0.069	0.076	0.075	**0.085**
Annual Average [b]	0.016	**0.016**	0.014	0.015	0.013
Bakersfield - Golden State Highway					
Maximum 1-Hour Average [a]	0.094	0.078	0.088	0.077	0.083
Annual Average [b]	0.027	0.023	0.015	0.024	0.023
Bakersfield - 5558 California Avenue					
Maximum 1-Hour Average [a]	0.107	0.089	0.115	0.107	0.085
Annual Average [b]	0.025	0.024	0.022	0.021	0.020

Note: Maximum average values occurring during the past five years are indicated in bold.
[a] All 1-hr concentrations are below the California NO_2 ambient air quality standard of 0.25 ppm.
[b] All annual average concentrations are below the federal NO_2 ambient air quality standard of 0.053 ppm.
Source: CARB, 2004 California Air Quality Data Statistics. (http:\\www.arb.ca.gov).
ppm = parts per million.

Table 8. Ambient Sulfur Dioxide Levels near Bakersfield, 1995-2003 (ppm)

	1995	1996	1997	1998	1999	2000	2001	2002	2003
Oildale-3311 Manor Street, Kern County									
Maximum 1-Hour Average [a]	0.022	0.018	0.02	--	--	--	--	--	--
Maximum 24-Hour Average [b]	0.0087	0.0131	0.0054	--	--	--	--	--	--
Annual Average [c]	0.0034	0.0027	0.0018	--	--	--	--	--	--
Bakersfield-5558 California Avenue, Kern County									
Maximum 1-Hour Average [a]	0.026	0.059	0.011	--	0.011	0.019	**0.03**	--	--
Maximum 24-Hour Average [b]	0.0149	0.0105	0.004	--	**0.0063**	0.003	0.005	--	--
Annual Average [c]	0.0028	0.0022	0.002	--	**0.0032**	0.003	0.002	--	--

[a] All 1-hour average concentrations are below the California SO_2 ambient air quality standard of 0.25 ppm.
[b] All 24-hour concentrations are below the California SO_2 ambient air quality standard of 0.05 ppm (131 $\mu g/m^3$) and the federal ambient air quality standard of 0.14 ppm (365 $\mu g/m^3$).
[c] All annual average concentrations are below the federal SO_2 ambient air quality standard of 0.03 ppm (80 $\mu g/m^3$).
Source: CARB, 2004 California Air Quality Data Statistics. (http:\\www.arb.ca.gov).
-- = Data not available
ppm = parts per million
$\mu g/m^3$ = micrograms per cubic meter

Air Quality Impact Results

The results of the air quality analysis are summarized in Tables 9 and 10. Neither the Sycamore impacts alone, nor the cumulative impacts are predicted to cause the exceedance of any applicable AAQS. Excerpts of the ISCST3 model results attached.

Conclusions

An air quality impact analysis was conducted for operating two existing cogeneration units either in simple cycle or cogeneration at the Sycamore facility. Analyses for current operations at Sycamore (4 cogeneration units), post-project operations at Sycamore (2 simple cycle units, 2 cogeneration units) and cumulative effects including the Sycamore facility were completed. Results of the modeling indicate that neither the post-project Sycamore facility nor the cumulative impacts including KRCC would cause a new violation of any AAQS. In addition, the modeling analysis results show that air impacts will be slightly lower after the project is completed than they are currently from the KRCC facility.

References

URS Corporation. 2004. Personal communications between David Stein of URS Corp. and Daniel Beck of Sycamore Cogeneration Co. July.

U.S Environmental Protection Agency (USEPA). 1985. "Guidance for Determination of Good Engineering Practice Stack Height (Technical Support Document for the Stack Height Regulations)." Revised. EPA Publication 450/4-80-023R (NTIS No. PB. 85-225241). Office of Air Quality Planning and Standards, Environmental Protection Agency. Research Triangle Park, NC.

Table 9. ISCST3 Modeling Results

Pollutant	Averaging Period	Maximum Modeled Impact ($\mu g/m^3$)	Background[b] ($\mu g/m^3$)	Total Predicted Concentration ($\mu g/m^3$)	AAQS ($\mu g/m^3$)	% of Standard
Sycamore Impacts - Current						
CO	1-hour	178.9	12,025	12,201	23,000	53.1
	8-hour	31.7	6,161	6,193	10,000	61.9
NO_2	1-hour	174.1	159.9	334.0	470	71.1
	Annual	1.15	30.1	31.3	100	31.3
PM_{10}	24-hour	0.81	166	166.8	50	333.6
	Annual	0.085	50.8	50.9	30	169.7
SO_2	1-hour	0.92	57.6	58.5	655	8.9
	3-hour	0.47	57.6	58.0	1,300	4.5
	24-hour	0.081	22.8	22.9	105	21.8
	Annual	0.0085	8.9	8.9	80	11.1
Sycamore Impacts – After Project						
CO	1-hour	94.3	12,025	12,117	23,000	52.7
	8-hour	21.6	6,161	6,183	10,000	61.8
NO_2	1-hour	103.2	159.9	263.1	470	56.0
	Annual	0.68	30.1	30.8	100	30.8
PM_{10}	24-hour	0.54	166	166.5	50	333.0
	Annual	0.050	50.8	50.9	30	169.7
SO_2	1-hour	0.59	57.6	58.2	655	8.9
	3-hour	0.29	57.6	57.9	1,300	4.5
	24-hour	0.054	22.8	22.9	105	21.8
	Annual	0.0050	8.9	8.9	80	11.1
Cumulative Impacts (Sycamore after Project & KRCC after Project)						
CO	1-hour	143	12,025	12,164	23,000	52.9
	8-hour	40.4	6,161	6,201	10,000	62.0
NO_2	1-hour	164.9	159.9	324.8	470	69.1
	Annual	1.3	30.1	31.4	100	31.6
PM_{10}	24-hour	0.98	166	167	50	334.0
	Annual	0.096	50.8	50.9	30	169.7
SO_2	1-hour	0.98	57.6	58.7	655	8.9
	3-hour	0.44	57.6	58.0	1,300	4.5
	24-hour	0.098	22.8	22.9	105	21.8
	Annual	0.0096	8.9	8.9	80	11.1

a Source: 40 CFR 52.21

b Background represents the maximum value measured at Oildale, 1999-2003, except for SO_2. Values for Oildale were the highest for data collected between 1995-1997.

AAQS = Most stringent ambient air quality standard for the averaging period.

Table 10. Fumigation Impacts

Pollutant	SCREEN 3 Fumigation 1-hr Results [µg/m³]/[g/s]		Emission Rates	Maximum Impacts Turbines	Background Concentrations	Total Concentrations	Lowest AAQS
	Simple Cycle	Cogeneration	(lb/hr)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
CO 1-hour	0.553	1.518	200/63[1]	74.40	12,025	12,099	23,000
NO_2 1-hour	0.553	1.518	140/79.47[1]	72.51	159.9	232.4	470
SO_2 1-hour	0.553	1.518	0.5	0.38	57.6	57.98	655
SO_2 3-hour	0.553	1.518	0.5	0.38	57.6	57.98	1,300

[1] Both startup and normal emission rates are reported in the format: startup emissions/normal emissions. For purposes of modeling, one turbine is assumed to operate under start-up conditions and the remaining three turbines are assumed to operate under normal conditions.

BPIP Input and Output Files

```
'C:\Sycamore\Sycamore7-20-04.BST BEESTWin GEP Files 7/20/2004 11:25:14 AM'
'ST'
'METERS'        1.0
'UTMY'          0
 40
'KCogenA'        1              256.03
 8              8.763
319971.22       3924835.27
319980.31       3924831.77
319986.62       3924831.18
319992.89       3924834.1
319993.1        3924838.12
319988.33       3924841.37
319981.16       3924841.87
319971.85       3924839.94
'KGTA'           1              256.03
 4              5.4864
319955.82       3924850.25
319977.61       3924850
319977.83       3924853.63
319956.47       3924856.43
'KGTB'           1              256.03
 4              5.4864
319952.26       3924806.79
319974.07       3924806.87
319974.67       3924810.38
319952.7        3924812.79
'KCogenB'        1              256.03
 8              8.763
319967.81       3924791.94
319976.81       3924787.81
319983.39       3924787.69
319989.44       3924790.23
319989.63       3924794.65
319984.74       3924798.24
319978.03       3924798.47
319968.57       3924796.46
'KGTC'           1              256.03
 4              5.4864
319948.9        3924763.55
319970.73       3924763.19
319971.15       3924766.86
319949.03       3924769.76
'KCogenC'        1              256.03
 8              8.763
319964.38       3924747.5
319973.64       3924743.7
319979.81       3924743.27
319985.46       3924746.08
319986.36       3924750.49
319981.21       3924753.67
319974.23       3924754.26
319964.98       3924752.37
'KGTD'           1              256.03
 4              5.4864
319945.54       3924719.58
319967.3        3924719.52
319967.94       3924723.61
319945.82       3924726.51
'KCogenD'        1              256.03
 8              8.763
319961.19       3924704.75
319970.         3924701.22
319975.9        3924700.32
319981.95       3924702.81
319982.82       3924708.05
319977.74       3924710.98
319970.87       3924711.03
319961.58       3924709.34
'InletA'         1              256.03
 4              12.192
319942.01       3924862.26
319951.94       3924861.56
319950.88       3924845.45
319940.38       3924846.71
'InletB'         1              256.03
 4              12.192
319947.71       3924802.14
319937.31       3924803.36
319938.43       3924818.5
319948.81       3924817.53
'InletC'         1              256.03
 4              12.192
319943.97       3924758.78
```

```
319934.16     3924759.76
319934.94     3924774.78
319945.69     3924773.55
'InletD'       1             256.03
 4            12.192
319940.98     3924715.32
319930.97     3924716.17
319931.46     3924731.75
319941.91     3924731.02
'CoolerA'      1             256.03
 4            13.2588
319951.25     3924849.12
319954.66     3924848.73
319955.61     3924857.71
319952.73     3924858.11
'CoolerB'      1             256.03
 4            13.2588
319948.21     3924805.61
319951.4      3924805.53
319952.25     3924814.37
319948.78     3924814.61
'CoolerC'      1             256.03
 4            13.2588
319944.79     3924762.13
319948.54     3924761.92
319949.25     3924770.77
319945.2      3924771.54
'CoolerD'      1             256.03
 4            13.2588
319941.5      3924718.45
319944.89     3924718.46
319945.83     3924727.34
319942.3      3924727.97
'S_CogenA'     1             233.99
 8            8.763
318289.26     3925127.08
318292.65     3925133.4
318292.88     3925139.48
318289.47     3925150.96
318284.57     3925151.08
318281.72     3925139.55
318281.78     3925133.09
318284.6      3925127.84
'S_CogenB'     1             233.99
 8            8.763
318331.63     3925127.34
318335.07     3925132.34
318335.11     3925138.71
318332.81     3925150.71
318327.23     3925151.04
318324.04     3925139.23
318323.76     3925133.4
318327.02     3925128.14
'S_CogenC'     1             233.99
 9            8.763
318374.58     3925127.2
318377.87     3925132.69
318377.76     3925139.75
318374.45     3925151.13
318369.98     3925151.05
318366.6      3925139.53
318366.85     3925133.26
318370.26     3925127.22
318370.5      3925127.22
'S_CogenD'     1             233.99
 8            8.763
318417.57     3925127.55
318420.87     3925132.84
318420.27     3925140.15
318417.64     3925150.89
318412.49     3925151.21
318409.31     3925139.25
318410.24     3925132.48
318413.25     3925127.52
'SInletA'      1             233.99
 4            12.192
318297.67     3925186.28
318305.25     3925186.28
318305.25     3925180.76
318297.67     3925180.39
'SCoolerA'     1             233.99
 4            13.2588
318292.68     3925180.76
318310.54     3925180.48
```

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318310.6        3925173.19
318292.59       3925172.93
'S-GTA'          1              233.99
 4              5.4864
318306.04       3925173.31
318303.45       3925145.63
318300.25       3925145.29
318297.11       3925172.96
'SInletB'        1              233.99
 4              12.192
318340.57       3925185.94
318348.29       3925186.01
318348.15       3925180.77
318340.53       3925180.79
'SCoolerB'       1              233.99
 4              13.2588
318335.48       3925180.77
318353.34       3925180.88
318353.35       3925173.1
318335.64       3925172.94
'S-GTB'          1              233.99
 4              5.4864
318349.13       3925172.87
318346.6        3925145.29
318342.86       3925145.35
318339.86       3925173.12
'SInletC'        1              233.99
 4              12.192
318383.47       3925185.8
318390.9        3925186.03
318390.91       3925180.63
318383.29       3925180.65
'SCoolerC'       1              233.99
 4              13.2588
318378.43       3925180.63
318395.81       3925180.65
318396.01       3925172.91
318378.3        3925172.9
'S-GTC'          1              233.99
 4              5.4864
318392.08       3925172.54
318389.4        3925145.35
318385.71       3925145.26
318382.23       3925172.94
'SInletD'        1              233.99
 4              12.192
318426.03       3925185.77
318433.36       3925185.65
318433.56       3925180.2
318426.04       3925180.37
'SCoolerD'       1              233.99
 4              13.2588
318421.19       3925180.4
318438.51       3925180.37
318438.72       3925172.78
318420.96       3925173.01
'S-GTD'          1              233.99
 4              5.4864
318434.64       3925172.89
318431.58       3925144.83
318428.18       3925145.18
318425.47       3925173.03
'StSys-A'        1              233.99
 7              7.0104
318284.3        3925150.79
318285.82       3925155.95
318291.84       3925158.37
318298.06       3925157.86
318298.18       3925152.62
318295.91       3925150.88
318289.62       3925150.49
'StSys-B'        1              233.99
 8              7.0104
318327.46       3925151.17
318328.68       3925156.22
318334.44       3925158.76
318338.54       3925158.72
318341.01       3925158.51
318341.4        3925152.92
318338.58       3925150.88
318332.36       3925150.72
'StSys-C'        1              233.99
 8              7.0104
318370.25       3925151.02
```

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318371.28      3925156.12
318377.55      3925158.99
318381.64      3925158.72
318383.57      3925158.53
318383.81      3925153.2
318381.69      3925151.11
318375.43      3925151.15
'StSys-D'       1             233.99
 8             7.0104
318412.78      3925151.14
318413.65      3925156.3
318420.03      3925158.92
318424.21      3925158.99
318426.08      3925158.48
318425.97      3925153.12
318424.14      3925151.33
318417.74      3925151.19
'KSTSYSD'       1             256.03
 7             7.0104
319970.81      3924835.5
319965.85      3924838.5
319964.85      3924845.5
319965.63      3924850.25
319971.66      3924850.
319971.44      3924840.
319970.81      3924835.5
'KSTSYSC'       1             256.03
 7             7.0104
319967.34      3924792.
319962.38      3924795.
319961.38      3924802.
319962.16      3924806.75
319968.19      3924806.5
319967.97      3924796.5
319967.34      3924792.
'KSTSYSB'       1             256.03
 7             7.0104
319963.78      3924747.75
319958.82      3924750.75
319957.82      3924757.75
319958.6       3924762.5
319964.63      3924762.25
319964.41      3924752.25
319963.78      3924747.75
'KSTSYSA'       1             256.03
 7             7.0104
319960.97      3924704.25
319956.01      3924707.25
319955.01      3924714.25
319955.79      3924719.
319961.82      3924718.75
319961.6       3924708.75
319960.97      3924704.25
 12
'KRCCA   '      256.03         19.9897       319995.92      3924835.69
'KRCCB   '      256.03         19.9897       319992.9       3924792.47
'KRCCC   '      256.03         19.9897       319989.29      3924748.96
'KRCCD   '      256.03         19.9897       319986.3       3924705.55
'KRCCSSC '      256.03         14.2431       319961.66      3924757.5
'KRCCSSD '      256.03         14.2431       319958.88      3924715.75
'SYCA    '      233.99         19.9897       318287.01      3925124.79
'SYCB    '      233.99         19.9897       318330.31      3925124.79
'SYCC    '      233.99         19.9897       318372.41      3925124.99
'SYCD    '      233.99         19.9897       318415.31      3925124.99
'SYCSSA  '      233.99         14.2431       318292.        3925154.84
'SYCSSD  '      233.99         14.2431       318422.11      3925155.59
```

BEE-Line Software Version: 9.30

Input File - Sycamore7-20-04.GPW
Input File - Sycamore7-20-04.PIP
Output File - Sycamore7-20-04.TAB
Output File - Sycamore7-20-04.SUM
Output File - Sycamore7-20-04.SO

BPIP (Dated: 04112)
DATE : 7/20/2004
TIME : 11:25:15
C:\Sycamore\Sycamore7-20-04.BST BEESTWin GEP Files 7/20/2004 11:25:14 AM

==========
BPIP PROCESSING INFORMATION:
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The ST flag has been set for preparing downwash data for an ISCST run.

Inputs entered in METERS will be converted to meters using a conversion factor of 1.0000. Output will be in meters.

The UTMP variable is set to UTMY. The input is assumed to be in UTM coordinates. BPIP will move the UTM origin to the first pair of UTM coordinates read. The UTM coordinates of the new origin will be subtracted from all the other UTM coordinates entered to form this new local coordinate system.

Plant north is set to 0.00 degrees with respect to True North.

C:\Sycamore\Sycamore7-20-04.BST BEESTWin GEP Files 7/20/2004 11:25:14 AM

PRELIMINARY* GEP STACK HEIGHT RESULTS TABLE
(Output Units: meters)

Stack Name	Stack Height	Stack-Building Base Elevation Differences	GEP** EQN1	Preliminary* GEP Stack Height Value
KRCCA	19.99	0.00	30.48	65.00
KRCCB	19.99	0.00	30.48	65.00
KRCCC	19.99	0.00	30.48	65.00
KRCCD	19.99	0.00	30.48	65.00
KRCCSSC	14.24	0.00	30.48	65.00
KRCCSSD	14.24	0.00	30.48	65.00
SYCA	19.99	0.00	33.15	65.00
SYCB	19.99	0.00	33.15	65.00
SYCC	19.99	0.00	33.15	65.00
SYCD	19.99	0.00	33.15	65.00
SYCSSA	14.24	0.00	33.15	65.00
SYCSSD	14.24	0.00	33.15	65.00

* Results are based on Determinants 1 & 2 on pages 1 & 2 of the GEP Technical Support Document. Determinant 3 may be investigated for additional stack height credit. Final values result after Determinant 3 has been taken into consideration.
** Results were derived from Equation 1 on page 6 of GEP Technical Support Document. Values have been adjusted for any stack-building base elevation differences.

Note: Criteria for determining stack heights for modeling emission limitations for a source can be found in Table 3.1 of the GEP Technical Support Document.

BPIP (Dated: 04112)
DATE : 7/20/2004
TIME : 11:25:15

C:\Sycamore\Sycamore7-20-04.BST BEESTWin GEP Files 7/20/2004 11:25:14 AM

BPIP output is in meters

```
SO BUILDHGT KRCCA       8.76    8.76    8.76    8.76   12.19   12.19
SO BUILDHGT KRCCA      12.19    8.76    8.76   12.19   12.19   12.19
SO BUILDHGT KRCCA       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT KRCCA       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT KRCCA       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT KRCCA       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDWID KRCCA      21.63   21.74   21.14   19.87   18.50   18.81
SO BUILDWID KRCCA      18.55   11.48   10.69   16.63   17.91   18.64
SO BUILDWID KRCCA      16.25   18.59   20.37   21.54   22.04   21.88
SO BUILDWID KRCCA      21.73   21.77   21.14   19.87   18.00   15.58
SO BUILDWID KRCCA      13.28   11.48   10.69   10.85   11.76   13.84
SO BUILDWID KRCCA      16.25   18.59   20.37   21.54   22.04   21.88


SO BUILDHGT KRCCB       8.76    8.76    8.76    8.76   12.19   12.19
SO BUILDHGT KRCCB      12.19    8.76    8.76   12.19   12.19   12.19
SO BUILDHGT KRCCB       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT KRCCB       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT KRCCB       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT KRCCB       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDWID KRCCB      21.38   21.40   20.88   19.99   18.06   18.37
SO BUILDWID KRCCB      18.12   11.55   10.78   15.95   17.25   18.02
SO BUILDWID KRCCB      16.10   18.46   20.25   21.43   21.96   21.82
SO BUILDWID KRCCB      21.63   21.74   21.19   19.99   18.19   15.83
SO BUILDWID KRCCB      13.31   11.55   10.78   11.65   12.51   13.92
SO BUILDWID KRCCB      16.10   18.46   20.25   21.43   21.96   21.82


SO BUILDHGT KRCCC       8.76    8.76    8.76    8.76   12.19   12.19
SO BUILDHGT KRCCC      12.19    8.76    8.76   12.19   12.19   12.19
SO BUILDHGT KRCCC       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT KRCCC       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT KRCCC       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT KRCCC       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDWID KRCCC      21.19   21.37   20.88   19.73   18.71   18.99
SO BUILDWID KRCCC      18.70   11.79   10.99   15.58   16.90   17.71
SO BUILDWID KRCCC      16.42   18.76   20.25   21.43   21.96   21.82
SO BUILDWID KRCCC      21.38   21.40   20.88   19.73   17.98   15.69
SO BUILDWID KRCCC      13.62   11.79   10.99   11.13   11.96   13.76
SO BUILDWID KRCCC      16.42   18.76   20.53   21.68   22.17   21.98


SO BUILDHGT KRCCD       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT KRCCD       8.76    8.76    8.76   12.19   12.19   12.19
SO BUILDHGT KRCCD       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT KRCCD       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT KRCCD       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT KRCCD       8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDWID KRCCD      21.19   21.37   20.91   19.80   18.10   15.84
SO BUILDWID KRCCD      13.37   11.42   10.71   16.52   17.70   18.33
SO BUILDWID KRCCD      16.43   18.69   20.38   21.45   21.87   21.63
SO BUILDWID KRCCD      21.19   21.37   20.91   19.80   18.10   15.84
SO BUILDWID KRCCD      13.37   11.42   10.71   10.96   11.82   13.67
SO BUILDWID KRCCD      16.43   18.69   20.38   21.45   21.87   21.63


SO BUILDHGT KRCCSSC     8.76   12.19   12.19   12.19   12.19    7.01
SO BUILDHGT KRCCSSC     7.01   12.19   12.19   12.19   12.19   12.19
SO BUILDHGT KRCCSSC    12.19   12.19   12.19   12.19   12.19    8.76
SO BUILDHGT KRCCSSC     8.76    8.76    8.76    8.76    7.01    7.01
SO BUILDHGT KRCCSSC     7.01   12.19   12.19   12.19   12.19   12.19
SO BUILDHGT KRCCSSC    12.19   12.19   12.19    8.76    8.76    8.76
SO BUILDWID KRCCSSC    21.38   14.57   16.46   17.85   18.71   15.36
SO BUILDWID KRCCSSC    15.63   17.32   16.00   15.58   16.90   17.71
SO BUILDWID KRCCSSC    17.98   17.70   16.88   15.65   13.79   21.98
SO BUILDWID KRCCSSC    21.38   21.74   21.19   19.99   14.63   15.36
SO BUILDWID KRCCSSC    15.63   17.32   16.00   15.58   16.90   17.71
SO BUILDWID KRCCSSC    17.98   17.70   16.88   21.68   22.17   21.98


SO BUILDHGT KRCCSSD     8.76    7.01    7.01    7.01    7.01    7.01
SO BUILDHGT KRCCSSD    12.19   12.19   12.19   12.19   12.19   12.19
SO BUILDHGT KRCCSSD    12.19   12.19   12.19   12.19   12.19    8.76
SO BUILDHGT KRCCSSD     8.76    8.76    8.76    8.76    7.01    7.01
SO BUILDHGT KRCCSSD    12.19   12.19   12.19   12.19   12.19   12.19
SO BUILDHGT KRCCSSD    12.19   12.19   12.19    8.76    8.76    8.76
SO BUILDWID KRCCSSD    21.19    9.91   11.86   13.45   14.63   15.36
SO BUILDWID KRCCSSD    18.70   17.83   16.43   16.52   17.70   18.33
SO BUILDWID KRCCSSD    18.41   17.93   16.88   15.55   13.75   21.63
SO BUILDWID KRCCSSD    21.19   21.40   20.88   19.73   14.63   15.36
SO BUILDWID KRCCSSD    18.70   17.83   16.43   16.52   17.70   18.33
SO BUILDWID KRCCSSD    18.41   17.93   18.45   21.45   21.87   21.63
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```
SO BUILDHGT SYCA        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT SYCA        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT SYCA        8.76    8.76    8.76    8.76    8.76   13.26
SO BUILDHGT SYCA       13.26   13.26   13.26    8.76    8.76    8.76
SO BUILDHGT SYCA        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT SYCA        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDWID SYCA       11.83   13.64   16.06   19.02   21.40   23.13
SO BUILDWID SYCA       24.16   24.45   24.00   23.61   23.39   22.46
SO BUILDWID SYCA       20.84   18.59   15.78   13.34   12.04   18.01
SO BUILDWID SYCA       18.96   19.43   19.30   19.02   21.40   22.72
SO BUILDWID SYCA       23.78   24.10   23.70   23.61   23.39   22.46
SO BUILDWID SYCA       20.84   18.59   15.78   13.34   12.04   11.16

SO BUILDHGT SYCB        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT SYCB        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT SYCB        8.76   13.26   13.26   13.26    8.76   13.26
SO BUILDHGT SYCB       13.26   13.26   13.26    8.76    8.76    8.76
SO BUILDHGT SYCB        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT SYCB        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDWID SYCB       12.06   13.76   16.14   18.60   20.98   22.72
SO BUILDWID SYCB       23.78   24.10   23.70   23.23   23.19   22.44
SO BUILDWID SYCB       21.01   18.60   19.32   19.45   12.10   17.87
SO BUILDWID SYCB       18.93   19.42   19.31   18.60   20.98   22.72
SO BUILDWID SYCB       23.78   24.10   23.70   23.23   23.19   22.44
SO BUILDWID SYCB       21.01   18.94   16.49   14.42   12.10   11.35

SO BUILDHGT SYCC        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT SYCC        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT SYCC        8.76   13.26   13.26   13.26    8.76   13.26
SO BUILDHGT SYCC       13.26   13.26   13.26    8.76    8.76    8.76
SO BUILDHGT SYCC        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT SYCC        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDWID SYCC       12.29   13.69   16.01   18.85   21.23   22.95
SO BUILDWID SYCC       23.98   24.29   23.70   23.23   23.19   22.44
SO BUILDWID SYCC       21.01   18.66   19.30   19.35   11.87   17.71
SO BUILDWID SYCC       18.65   19.16   19.08   18.85   21.23   22.95
SO BUILDWID SYCC       23.97   24.18   23.69   24.27   23.90   22.80
SO BUILDWID SYCC       21.01   18.58   15.58   13.25   11.87   11.27

SO BUILDHGT SYCD        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT SYCD        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT SYCD        8.76   13.26   13.26   13.26    8.76   13.26
SO BUILDHGT SYCD       13.26   13.26   13.26    8.76    8.76    8.76
SO BUILDHGT SYCD        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT SYCD        8.76    8.76    8.76    8.76    8.76    8.76
SO BUILDWID SYCD       12.50   14.16   16.44   19.10   21.39   23.03
SO BUILDWID SYCD       23.97   24.18   23.69   23.78   23.46   22.43
SO BUILDWID SYCD       20.72   18.40   19.04   19.10   11.21   17.76
SO BUILDWID SYCD       18.59   19.08   18.99   19.10   21.39   23.03
SO BUILDWID SYCD       23.97   24.18   23.69   23.78   23.46   22.43
SO BUILDWID SYCD       20.72   18.38   15.61   13.25   11.21   11.56

SO BUILDHGT SYCSSA     13.26   13.26   13.26   13.26   13.26   13.26
SO BUILDHGT SYCSSA      8.76    8.76    8.76    8.76    7.01    7.01
SO BUILDHGT SYCSSA      7.01    7.01    8.76    8.76   13.26   13.26
SO BUILDHGT SYCSSA     13.26   13.26   13.26   13.26   13.26   13.26
SO BUILDHGT SYCSSA     13.26    8.76    8.76    8.76    8.76    8.76
SO BUILDHGT SYCSSA      8.76    7.01    8.76    8.76   13.26   13.26
SO BUILDWID SYCSSA     18.96   19.43   19.30   18.59   17.32   15.52
SO BUILDWID SYCSSA     24.16   24.45   24.00   23.61   11.35   13.00
SO BUILDWID SYCSSA     14.26   15.09   15.78   13.34   18.99   18.01
SO BUILDWID SYCSSA     18.96   19.43   19.30   18.59   17.32   15.52
SO BUILDWID SYCSSA     13.32   24.45   23.70   23.23   23.19   22.44
SO BUILDWID SYCSSA     21.01   15.09   15.78   13.34   18.99   18.01

SO BUILDHGT SYCSSD     13.26   13.26   13.26   13.26   13.26   13.26
SO BUILDHGT SYCSSD      8.76    8.76    8.76    7.01   13.26   13.26
SO BUILDHGT SYCSSD     13.26   13.26    7.01   13.26   13.26   13.26
SO BUILDHGT SYCSSD     13.26   13.26   13.26   13.26   13.26   13.26
SO BUILDHGT SYCSSD      8.76    8.76    8.76    7.01    7.01    7.01
SO BUILDHGT SYCSSD      7.01    7.01    7.01   13.26   13.26   13.26
SO BUILDWID SYCSSD     18.59   19.08   18.99   18.33   17.11   15.36
SO BUILDWID SYCSSD     23.97   24.18   23.69    9.72   13.27   15.47
SO BUILDWID SYCSSD     17.19   18.40   15.19   19.01   18.56   17.76
SO BUILDWID SYCSSD     18.59   19.08   18.99   18.33   17.11   15.36
SO BUILDWID SYCSSD     23.97   24.18   23.69    9.72   11.45   13.01
SO BUILDWID SYCSSD     14.17   14.91   15.19   19.01   18.56   17.76
```

SCREEN3 Fumigation Output File

07/20/04
15:58:57

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

Sycamore Cogeneration Operation

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	1.00000
STACK HEIGHT (M)	=	19.9900
STK INSIDE DIAM (M)	=	4.3000
STK EXIT VELOCITY (M/S)	=	23.6700
STK GAS EXIT TEMP (K)	=	419.2600
AMBIENT AIR TEMP (K)	=	293.0000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	RURAL
BUILDING HEIGHT (M)	=	.0000
MIN HORIZ BLDG DIM (M)	=	.0000
MAX HORIZ BLDG DIM (M)	=	.0000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

BUOY. FLUX = 323.115 M**4/S**3; MOM. FLUX = 1809.913 M**4/S**2.

*** FULL METEOROLOGY ***

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	1	1.0	1.0	1202.3	1201.34	9.31	9.31	NO
100.	.4624E-01	6	1.0	1.5	10000.0	169.05	42.78	42.65	NO
200.	.5151E-01	5	1.0	1.3	10000.0	208.11	54.99	54.11	NO
300.	.5475E-01	5	1.0	1.3	10000.0	208.11	56.34	54.45	NO
400.	.5831E-01	5	1.0	1.3	10000.0	208.11	58.08	54.83	NO
500.	.6241E-01	5	1.0	1.3	10000.0	208.11	60.16	55.25	NO
600.	.2010	1	3.0	3.1	960.0	413.77	150.59	169.47	NO
700.	.4951	1	3.0	3.1	960.0	413.77	171.36	227.32	NO
800.	.6700	1	3.0	3.1	960.0	413.77	191.69	295.74	NO
900.	.8582	1	2.0	2.1	640.0	610.67	235.73	388.93	NO
1000.	1.011	1	2.0	2.1	640.0	610.67	256.68	477.81	NO
MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:									
1072.	1.036	1	2.0	2.1	640.0	610.67	271.33	547.58	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

*** INVERSION BREAK-UP FUMIGATION CALC. ***
CONC (UG/M**3) = 1.518
DIST TO MAX (M) = 13997.19

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	1.036	1072.	0.
INV BREAKUP FUMI	1.518	13997.	--

****
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
****

07/20/04
16:00:40

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

Sycamore Simple Cycle Operations

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	1.00000
STACK HEIGHT (M)	=	14.2400
STK INSIDE DIAM (M)	=	5.3700
STK EXIT VELOCITY (M/S)	=	29.9100
STK GAS EXIT TEMP (K)	=	824.8200
AMBIENT AIR TEMP (K)	=	293.0000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	RURAL
BUILDING HEIGHT (M)	=	.0000
MIN HORIZ BLDG DIM (M)	=	.0000
MAX HORIZ BLDG DIM (M)	=	.0000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

BUOY. FLUX = 1363.356 M**4/S**3; MOM. FLUX = 2291.025 M**4/S**2.

*** FULL METEOROLOGY ***

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	1	1.0	1.0	2885.0	2883.98	10.42	10.41	NO
100.	.5336E-01	6	1.0	1.2	10000.0	270.57	73.35	73.27	NO
200.	.5386E-01	6	1.0	1.2	10000.0	270.57	73.64	73.35	NO
300.	.5448E-01	6	1.0	1.2	10000.0	270.57	74.09	73.45	NO
400.	.5519E-01	6	1.0	1.2	10000.0	270.57	74.69	73.58	NO
500.	.5598E-01	6	1.0	1.2	10000.0	270.57	75.41	73.72	NO
600.	.5686E-01	6	1.0	1.2	10000.0	270.57	76.25	73.87	NO
700.	.5781E-01	6	1.0	1.2	10000.0	270.57	77.21	74.05	NO
800.	.5857E-01	6	1.0	1.2	10000.0	270.57	78.28	74.21	NO
900.	.1030	1	3.0	3.1	971.8	970.82	244.50	394.30	NO
1000.	.2127	1	3.0	3.1	971.8	970.82	265.95	482.86	NO
MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:									
1318.	.3818	1	3.0	3.1	971.8	970.82	331.60	836.66	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

*** INVERSION BREAK-UP FUMIGATION CALC. ***
CONC (UG/M**3) = .5531
DIST TO MAX (M) = 29352.70

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	.3818	1318.	0.
INV BREAKUP FUMI	.5531	29353.	--

****
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
****

Excerpts of ISCST3 Model Results

*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant ***
*** Model Executed on 07/20/04 at 17:06:25 ***
Input File - C:\Sycamore\Sycamore7-20-04_86_CO1.DTA

Output File - C:\Sycamore\Sycamore7-20-04_86_CO1.LST

Met File - C:\Sycamore\BFL86.asc

Number of sources - 10
Number of source groups - 5
Number of receptors - 13966

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.79400E+01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.79400E+01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.79400E+01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.79400E+01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.79400E+01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.79400E+01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.79400E+01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.25200E+02	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.79400E+01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.25200E+02	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF CO1 IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH	1ST HIGH VALUE IS	178.91653	ON 86082905: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	175.72969	ON 86121518: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SYCAFTR	HIGH	1ST HIGH VALUE IS	94.22510	ON 86121518: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	94.20552	ON 86012420: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
KRCCAFTR	HIGH	1ST HIGH VALUE IS	57.13165	ON 86082905: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	55.88123	ON 86120320: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	236.04819	ON 86082905: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	185.65549	ON 86112406: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	143.00368	ON 86082905: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	120.28556	ON 86012420: AT (	322250.00,	3929500.00,	363.90,	0.00)	DC

```
*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                          ***
*** Model Executed on 07/20/04 at 17:09:55 ***
 Input File - C:\Sycamore\Sycamore7-20-04_87_CO1.DTA

Output File - C:\Sycamore\Sycamore7-20-04_87_CO1.LST

   Met File - C:\Sycamore\BFL87.asc

      Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
```

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.79400E+01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.79400E+01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.79400E+01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.79400E+01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.79400E+01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.79400E+01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.79400E+01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.25200E+02	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.79400E+01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.25200E+02	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF CO1 IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE
SYCBFR	HIGH	1ST HIGH VALUE IS	178.91653	ON 87092806: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
	HIGH	2ND HIGH VALUE IS	159.32033	ON 87041605: AT (320250.00, 3929500.00, 356.10, 0.00)	DC
SYCAFTR	HIGH	1ST HIGH VALUE IS	86.60466	ON 87032920: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
	HIGH	2ND HIGH VALUE IS	85.87202	ON 87092806: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
KRCCAFTR	HIGH	1ST HIGH VALUE IS	57.13165	ON 87092806: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
	HIGH	2ND HIGH VALUE IS	56.76577	ON 87041605: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	236.04819	ON 87092806: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
	HIGH	2ND HIGH VALUE IS	159.32033	ON 87041605: AT (320250.00, 3929500.00, 356.10, 0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	143.00368	ON 87092806: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
	HIGH	2ND HIGH VALUE IS	116.83167	ON 87073105: AT (320750.00, 3929500.00, 361.70, 0.00)	DC

*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant ***
*** Model Executed on 07/20/04 at 17:13:43 ***
Input File - C:\Sycamore\Sycamore7-20-04_88_CO1.DTA

Output File - C:\Sycamore\Sycamore7-20-04_88_CO1.LST

Met File - C:\Sycamore\BFL88.asc

Number of sources - 10
Number of source groups - 5
Number of receptors - 13966

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.79400E+01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.79400E+01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.79400E+01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.79400E+01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.79400E+01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.79400E+01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.79400E+01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.25200E+02	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.79400E+01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.25200E+02	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF CO1 IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE
SYCBFR	HIGH	1ST HIGH VALUE IS	156.07635	ON 88090305: AT (318000.00, 3930250.00, 360.70, 0.00)	DC
	HIGH	2ND HIGH VALUE IS	151.52762	ON 88101206: AT (318000.00, 3930250.00, 360.70, 0.00)	DC
SYCAFTR	HIGH	1ST HIGH VALUE IS	86.97160	ON 88120119: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
	HIGH	2ND HIGH VALUE IS	80.40220	ON 88101206: AT (318000.00, 3930250.00, 360.70, 0.00)	DC
KRCCAFTR	HIGH	1ST HIGH VALUE IS	56.20285	ON 88021021: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
	HIGH	2ND HIGH VALUE IS	53.71495	ON 88051006: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	191.93292	ON 88101206: AT (318000.00, 3930250.00, 360.70, 0.00)	DC
	HIGH	2ND HIGH VALUE IS	176.50607	ON 88031306: AT (318000.00, 3929500.00, 345.10, 0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	120.80750	ON 88101206: AT (318000.00, 3930250.00, 360.70, 0.00)	DC
	HIGH	2ND HIGH VALUE IS	113.41124	ON 88091105: AT (318000.00, 3930250.00, 360.70, 0.00)	DC

```
*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                                    ***
*** Model Executed on 07/20/04 at 17:17:33 ***
 Input File - C:\Sycamore\Sycamore7-20-04_89_CO1.DTA

Output File - C:\Sycamore\Sycamore7-20-04_89_CO1.LST

   Met File - C:\Sycamore\BFL89.asc

     Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
```

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.79400E+01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.79400E+01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.79400E+01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.79400E+01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.79400E+01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.79400E+01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.79400E+01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.25200E+02	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.79400E+01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.25200E+02	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF CO1 IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE
SYCBFR	HIGH	1ST HIGH VALUE IS	176.28122	ON 89101606: AT (320500.00, 3929250.00, 364.70, 0.00)		DC
	HIGH	2ND HIGH VALUE IS	156.70309	ON 89110707: AT (320750.00, 3929500.00, 361.70, 0.00)		DC
SYCAFTR	HIGH	1ST HIGH VALUE IS	94.28160	ON 89101606: AT (320500.00, 3929250.00, 364.70, 0.00)		DC
	HIGH	2ND HIGH VALUE IS	86.99529	ON 89112107: AT (320500.00, 3929250.00, 364.70, 0.00)		DC
KRCCAFTR	HIGH	1ST HIGH VALUE IS	55.52949	ON 89121621: AT (320500.00, 3929250.00, 364.70, 0.00)		DC
	HIGH	2ND HIGH VALUE IS	49.34105	ON 89121621: AT (320750.00, 3929500.00, 361.70, 0.00)		DC
SBKA	HIGH	1ST HIGH VALUE IS	208.25192	ON 89101606: AT (320750.00, 3929500.00, 361.70, 0.00)		DC
	HIGH	2ND HIGH VALUE IS	156.70309	ON 89110707: AT (320750.00, 3929500.00, 361.70, 0.00)		DC
SAKA	HIGH	1ST HIGH VALUE IS	134.06474	ON 89101606: AT (320750.00, 3929500.00, 361.70, 0.00)		DC
	HIGH	2ND HIGH VALUE IS	101.63037	ON 89091320: AT (328750.00, 3928250.00, 455.40, 0.00)		DC

*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant ***
*** Model Executed on 07/20/04 at 17:21:04 ***
Input File - C:\Sycamore\Sycamore7-20-04_90_CO1.DTA

Output File - C:\Sycamore\Sycamore7-20-04_90_CO1.LST

Met File - C:\Sycamore\BFL90.asc

Number of sources - 10
Number of source groups - 5
Number of receptors - 13966

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.79400E+01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.79400E+01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.79400E+01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.79400E+01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.79400E+01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.79400E+01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.79400E+01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.25200E+02	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.79400E+01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.25200E+02	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF CO1 IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE
SYCBFR	HIGH	1ST HIGH VALUE IS	176.10754	ON 90021019: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
	HIGH	2ND HIGH VALUE IS	172.88916	ON 90122007: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
SYCAFTR	HIGH	1ST HIGH VALUE IS	94.26328	ON 90021019: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
	HIGH	2ND HIGH VALUE IS	94.02499	ON 90122007: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
KRCCAFTR	HIGH	1ST HIGH VALUE IS	56.68738	ON 90033020: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
	HIGH	2ND HIGH VALUE IS	56.20285	ON 90010118: AT (320500.00, 3929250.00, 364.70, 0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	208.03333	ON 90021019: AT (320750.00, 3929500.00, 361.70, 0.00)	DC
	HIGH	2ND HIGH VALUE IS	176.27356	ON 90100905: AT (319000.00, 3930500.00, 357.60, 0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	133.99106	ON 90021019: AT (320750.00, 3929500.00, 361.70, 0.00)	DC
	HIGH	2ND HIGH VALUE IS	110.97468	ON 90100905: AT (319000.00, 3930500.00, 357.60, 0.00)	DC

*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant ***
*** Model Executed on 07/20/04 at 12:20:13 ***
Input File - C:\Sycamore\Sycamore7-20-04_86_CO8.DTA

Output File - C:\Sycamore\Sycamore7-20-04_86_CO8.LST

Met File - C:\Sycamore\BFL86.asc

Number of sources - 10
Number of source groups - 5
Number of receptors - 13966

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.85700E+01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.85700E+01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.85700E+01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.85700E+01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.85700E+01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.85700E+01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.85700E+01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.85700E+01	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.85700E+01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.85700E+01	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

** CONC OF CO8 IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	31.67655b	ON 86012424:	AT (320750.00, 3928500.00, 348.70, 0.00)	DC
	HIGH 2ND HIGH VALUE IS	20.50919b	ON 86012424:	AT (320500.00, 3929250.00, 364.70, 0.00)	DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	19.88613b	ON 86012424:	AT (320750.00, 3928500.00, 348.70, 0.00)	DC
	HIGH 2ND HIGH VALUE IS	13.43217m	ON 86121524:	AT (320500.00, 3929250.00, 364.70, 0.00)	DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	16.66836m	ON 86082908:	AT (320500.00, 3929250.00, 364.70, 0.00)	DC
	HIGH 2ND HIGH VALUE IS	12.08377m	ON 86052424:	AT (328000.00, 3928750.00, 441.80, 0.00)	DC
SBKA	HIGH 1ST HIGH VALUE IS	37.46630m	ON 86082908:	AT (320500.00, 3929250.00, 364.70, 0.00)	DC
	HIGH 2ND HIGH VALUE IS	24.93229m	ON 86121524:	AT (320500.00, 3929250.00, 364.70, 0.00)	DC
SAKA	HIGH 1ST HIGH VALUE IS	28.65825m	ON 86082908:	AT (320500.00, 3929250.00, 364.70, 0.00)	DC
	HIGH 2ND HIGH VALUE IS	21.07360m	ON 86052424:	AT (327750.00, 3928750.00, 410.50, 0.00)	DC

*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant ***
*** Model Executed on 07/20/04 at 12:23:37 ***
Input File - C:\Sycamore\Sycamore7-20-04_87_CO8.DTA

Output File - C:\Sycamore\Sycamore7-20-04_87_CO8.LST

Met File - C:\Sycamore\BFL87.asc

Number of sources - 10
Number of source groups - 5
Number of receptors - 13966

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.85700E+01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.85700E+01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.85700E+01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.85700E+01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.85700E+01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.85700E+01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.85700E+01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.85700E+01	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.85700E+01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.85700E+01	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

** CONC OF CO8 IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH	1ST HIGH VALUE IS	30.08621m	ON 87080908:	AT (324750.00,	3929500.00,	373.40,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	18.66003m	ON 87092808:	AT (320250.00,	3929500.00,	356.10,	0.00)	DC
SYCAFTR	HIGH	1ST HIGH VALUE IS	21.58634m	ON 87080908:	AT (325000.00,	3929500.00,	382.80,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	11.93033b	ON 87032924:	AT (320500.00,	3929250.00,	364.70,	0.00)	DC
KRCCAFTR	HIGH	1ST HIGH VALUE IS	20.91400m	ON 87080908:	AT (328000.00,	3928750.00,	441.80,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	10.79271m	ON 87102008:	AT (318000.00,	3930250.00,	360.70,	0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	43.38420m	ON 87080908:	AT (326250.00,	3929500.00,	386.10,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	23.62203b	ON 87122524:	AT (325000.00,	3929500.00,	382.80,	0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	38.35954m	ON 87080908:	AT (327000.00,	3928750.00,	392.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	20.72790b	ON 87122524:	AT (325000.00,	3929500.00,	382.80,	0.00)	DC

```
*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                                    ***
*** Model Executed on 07/20/04 at 12:27:16 ***
 Input File - C:\Sycamore\Sycamore7-20-04_88_CO8.DTA

Output File - C:\Sycamore\Sycamore7-20-04_88_CO8.LST

   Met File - C:\Sycamore\BFL88.asc

      Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
```

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.85700E+01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.85700E+01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.85700E+01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.85700E+01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.85700E+01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.85700E+01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.85700E+01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.85700E+01	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.85700E+01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.85700E+01	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

** CONC OF CO8 IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	26.80791m	ON 88021024:	AT (318000.00, 3929500.00, 345.10, 0.00)	DC
	HIGH 2ND HIGH VALUE IS	18.19739b	ON 88090308:	AT (318000.00, 3930250.00, 360.70, 0.00)	DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	17.81211m	ON 88021024:	AT (318000.00, 3930250.00, 360.70, 0.00)	DC
	HIGH 2ND HIGH VALUE IS	11.73349b	ON 88090308:	AT (318000.00, 3930250.00, 360.70, 0.00)	DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	16.08461m	ON 88021024:	AT (320500.00, 3929250.00, 364.70, 0.00)	DC
	HIGH 2ND HIGH VALUE IS	11.30476m	ON 88091108:	AT (318000.00, 3930250.00, 360.70, 0.00)	DC
SBKA	HIGH 1ST HIGH VALUE IS	33.10446m	ON 88021024:	AT (318000.00, 3930250.00, 360.70, 0.00)	DC
	HIGH 2ND HIGH VALUE IS	26.48995m	ON 88091108:	AT (318000.00, 3930250.00, 360.70, 0.00)	DC
SAKA	HIGH 1ST HIGH VALUE IS	24.26655m	ON 88021024:	AT (318000.00, 3930250.00, 360.70, 0.00)	DC
	HIGH 2ND HIGH VALUE IS	21.70804m	ON 88091108:	AT (318000.00, 3930250.00, 360.70, 0.00)	DC

```
*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                                    ***
*** Model Executed on 07/20/04 at 12:30:59 ***
 Input File - C:\Sycamore\Sycamore7-20-04_89_CO8.DTA

Output File - C:\Sycamore\Sycamore7-20-04_89_CO8.LST

   Met File - C:\Sycamore\BFL89.asc

      Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
```

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.85700E+01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.85700E+01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.85700E+01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.85700E+01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.85700E+01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.85700E+01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.85700E+01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.85700E+01	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.85700E+01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.85700E+01	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

** CONC OF CO8 IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	20.49187m	ON 89101608: AT (320500.00, 3929250.00, 364.70, 0.00)		DC
	HIGH 2ND HIGH VALUE IS	18.21770m	ON 89110708: AT (320750.00, 3929500.00, 361.70, 0.00)		DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	13.45376m	ON 89101608: AT (320500.00, 3929250.00, 364.70, 0.00)		DC
	HIGH 2ND HIGH VALUE IS	11.97126m	ON 89110708: AT (320750.00, 3929500.00, 361.70, 0.00)		DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	12.56177m	ON 89092708: AT (328000.00, 3928750.00, 441.80, 0.00)		DC
	HIGH 2ND HIGH VALUE IS	8.91921b	ON 89091408: AT (317500.00, 3930250.00, 348.90, 0.00)		DC
SBKA	HIGH 1ST HIGH VALUE IS	27.38932m	ON 89101608: AT (320750.00, 3929500.00, 361.70, 0.00)		DC
	HIGH 2ND HIGH VALUE IS	18.72542b	ON 89112108: AT (321250.00, 3929500.00, 344.90, 0.00)		DC
SAKA	HIGH 1ST HIGH VALUE IS	23.33521m	ON 89092708: AT (328000.00, 3928750.00, 441.80, 0.00)		DC
	HIGH 2ND HIGH VALUE IS	15.12442m	ON 89012524: AT (317500.00, 3930250.00, 348.90, 0.00)		DC

*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant ***
*** Model Executed on 07/20/04 at 12:34:20 ***
Input File - C:\Sycamore\Sycamore7-20-04_90_CO8.DTA

Output File - C:\Sycamore\Sycamore7-20-04_90_CO8.LST

Met File - C:\Sycamore\BFL90.asc

Number of sources - 10
Number of source groups - 5
Number of receptors - 13966

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.85700E+01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.85700E+01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.85700E+01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.85700E+01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.85700E+01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.85700E+01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.85700E+01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.85700E+01	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.85700E+01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.85700E+01	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

** CONC OF CO8 IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH	1ST HIGH VALUE IS	30.91225m	ON 90021024:	AT (320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	20.09789m	ON 90122008:	AT (320500.00,	3929250.00,	364.70,	0.00)	DC
SYCAFTR	HIGH	1ST HIGH VALUE IS	20.74290m	ON 90021024:	AT (320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	13.32880m	ON 90122008:	AT (320500.00,	3929250.00,	364.70,	0.00)	DC
KRCCAFTR	HIGH	1ST HIGH VALUE IS	13.56577m	ON 90021024:	AT (322250.00,	3929500.00,	363.90,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	10.12833m	ON 90122408:	AT (318000.00,	3930250.00,	360.70,	0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	36.72807m	ON 90021024:	AT (320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	24.08950m	ON 90080408:	AT (317500.00,	3930250.00,	348.90,	0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	27.55496m	ON 90021024:	AT (320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	18.62916m	ON 90122008:	AT (322250.00,	3929500.00,	363.90,	0.00)	DC

*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant ***
*** Model Executed on 07/20/04 at 11:26:04 ***
Input File - C:\Sycamore\Sycamore7-20-04_86_NOX1.DTA

Output File - C:\Sycamore\Sycamore7-20-04_86_NOX1.LST

Met File - C:\Sycamore\BFL86.asc

Number of sources - 10
Number of source groups - 5
Number of receptors - 13966

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.10040E+02	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.10040E+02	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.10040E+02	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.10040E+02	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.10040E+02	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.10040E+02	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.10040E+02	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.17640E+02	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.10040E+02	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.17640E+02	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF NOX1 IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH	1ST HIGH VALUE IS	174.06586	ON 86082905: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	170.96686	ON 86121518: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SYCAFTR	HIGH	1ST HIGH VALUE IS	103.02831	ON 86121518: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	102.98369	ON 86012420: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
KRCCAFTR	HIGH	1ST HIGH VALUE IS	72.24204	ON 86082905: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	70.66090	ON 86120320: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	246.30789	ON 86082905: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	189.02168	ON 86012420: AT (	322250.00,	3929500.00,	363.90,	0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	164.98457	ON 86082905: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	139.15143	ON 86012420: AT (	322250.00,	3929500.00,	363.90,	0.00)	DC

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*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                                    ***
*** Model Executed on 07/20/04 at 11:29:37 ***
 Input File - C:\Sycamore\Sycamore7-20-04_87_NOX1.DTA

Output File - C:\Sycamore\Sycamore7-20-04_87_NOX1.LST

   Met File - C:\Sycamore\BFL87.asc

      Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
```

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.10040E+02	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.10040E+02	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.10040E+02	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.10040E+02	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.10040E+02	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.10040E+02	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.10040E+02	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.17640E+02	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.10040E+02	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.17640E+02	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF NOX1 IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH	1ST HIGH VALUE IS	174.06586	ON 87092806: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	155.04208	ON 87041605: AT (	320250.00,	3929500.00,	356.10,	0.00)	DC
SYCAFTR	HIGH	1ST HIGH VALUE IS	92.79224	ON 87032920: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	92.74252	ON 87092806: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
KRCCAFTR	HIGH	1ST HIGH VALUE IS	72.24204	ON 87092806: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	71.77939	ON 87041605: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	246.30789	ON 87092806: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	166.81935	ON 87073105: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	164.98457	ON 87092806: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	132.64642	ON 87073105: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC

```
*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                                    ***
*** Model Executed on 07/20/04 at 11:33:24 ***
 Input File - C:\Sycamore\Sycamore7-20-04_88_NOX1.DTA

Output File - C:\Sycamore\Sycamore7-20-04_88_NOX1.LST

   Met File - C:\Sycamore\BFL88.asc

     Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
```

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.10040E+02	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.10040E+02	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.10040E+02	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.10040E+02	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.10040E+02	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.10040E+02	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.10040E+02	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.17640E+02	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.10040E+02	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.17640E+02	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF NOX1 IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH	1ST HIGH VALUE IS	152.09451	ON 88090305: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	147.66150	ON 88101206: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
SYCAFTR	HIGH	1ST HIGH VALUE IS	92.97820	ON 88120119: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	88.23851	ON 88101206: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
KRCCAFTR	HIGH	1ST HIGH VALUE IS	71.06758	ON 88021021: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	67.92168	ON 88051006: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	198.75334	ON 88101206: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	181.25085	ON 88031306: AT (	318000.00,	3929500.00,	345.10,	0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	139.33035	ON 88101206: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	129.42255	ON 88091105: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC

*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant ***
*** Model Executed on 07/20/04 at 11:37:15 ***
Input File - C:\Sycamore\Sycamore7-20-04_89_NOX1.DTA

Output File - C:\Sycamore\Sycamore7-20-04_89_NOX1.LST

Met File - C:\Sycamore\BFL89.asc

Number of sources - 10
Number of source groups - 5
Number of receptors - 13966

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.10040E+02	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.10040E+02	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.10040E+02	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.10040E+02	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.10040E+02	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.10040E+02	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.10040E+02	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.17640E+02	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.10040E+02	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.17640E+02	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF NOX1 IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH	1ST HIGH VALUE IS	171.50317	ON 89101606: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	152.46350	ON 89110707: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
SYCAFTR	HIGH	1ST HIGH VALUE IS	103.15208	ON 89101606: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	92.99172	ON 89112107: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
KRCCAFTR	HIGH	1ST HIGH VALUE IS	70.21613	ON 89121621: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	62.39095	ON 89121621: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	217.18095	ON 89101606: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	152.46350	ON 89110707: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	155.33818	ON 89101606: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	111.52412	ON 89091320: AT (	328000.00,	3928500.00,	421.60,	0.00)	DC

*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant ***
*** Model Executed on 07/20/04 at 11:40:46 ***
Input File - C:\Sycamore\Sycamore7-20-04_90_NOX1.DTA

Output File - C:\Sycamore\Sycamore7-20-04_90_NOX1.LST

Met File - C:\Sycamore\BFL90.asc

Number of sources - 10
Number of source groups - 5
Number of receptors - 13966

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.10040E+02	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.10040E+02	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.10040E+02	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.10040E+02	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.10040E+02	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.10040E+02	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.10040E+02	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.17640E+02	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.10040E+02	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.17640E+02	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF NOX1 IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH	1ST HIGH VALUE IS	171.33429	ON 90021019: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	168.20461	ON 90122007: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SYCAFTR	HIGH	1ST HIGH VALUE IS	103.11267	ON 90021019: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	102.46658	ON 90122007: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
KRCCAFTR	HIGH	1ST HIGH VALUE IS	71.68026	ON 90033020: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	71.06758	ON 90010118: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	216.95265	ON 90021019: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	182.76698	ON 90100905: AT (	319000.00,	3930500.00,	357.60,	0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	155.23067	ON 90021019: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	128.25122	ON 90100905: AT (	319000.00,	3930500.00,	357.60,	0.00)	DC

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*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                          ***
*** Model Executed on 07/20/04 at 11:44:35 ***
 Input File - C:\Sycamore\Sycamore7-20-04_86_NOXA.DTA

Output File - C:\Sycamore\Sycamore7-20-04_86_NOXA.LST

   Met File - C:\Sycamore\BFL86.asc

      Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
```

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.85600E+01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.85600E+01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.85600E+01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.85600E+01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.85600E+01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.85600E+01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.85600E+01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.85600E+01	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.85600E+01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.85600E+01	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF NOXA IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
SYCBFR	1ST HIGHEST VALUE IS	1.03538 AT (320014.41, 3924017.50, 224.10, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	1.03299 AT (320014.41, 3924042.50, 225.00, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	1.02333 AT (319989.41, 3924042.50, 224.10, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	1.01944 AT (320014.41, 3923992.50, 221.60, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	1.01937 AT (319989.41, 3924017.50, 222.70, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	1.01753 AT (319939.41, 3924117.50, 227.50, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	1.01645 AT (319964.41, 3924092.50, 226.00, 0.00)	DC	NA
	8TH HIGHEST VALUE IS	1.01637 AT (319939.41, 3924092.50, 226.00, 0.00)	DC	NA
	9TH HIGHEST VALUE IS	1.01583 AT (319989.41, 3924067.50, 224.60, 0.00)	DC	NA
	10TH HIGHEST VALUE IS	1.01514 AT (319964.41, 3924117.50, 227.40, 0.00)	DC	NA
SYCAFTR	1ST HIGHEST VALUE IS	0.57483 AT (323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.55590 AT (323500.00, 3920250.00, 259.10, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.54936 AT (324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.54903 AT (323500.00, 3920000.00, 257.60, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.54042 AT (324000.00, 3920000.00, 254.60, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.53975 AT (323750.00, 3919750.00, 256.00, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.53961 AT (323750.00, 3920000.00, 259.50, 0.00)	DC	NA

	8TH HIGHEST VALUE IS	0.53779 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.53093 AT (	320014.41,	3924017.50,	224.10,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.52937 AT (	320014.41,	3924042.50,	225.00,	0.00)	DC	NA
KRCCAFTR	1ST HIGHEST VALUE IS	0.54535 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.51275 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.50636 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.46310 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.45923 AT (	322500.00,	3923250.00,	214.00,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.45446 AT (	322500.00,	3923000.00,	205.30,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.45193 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.44511 AT (	322750.00,	3923000.00,	203.00,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.44388 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.44201 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF NOXA IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF	TYPE	NETWORK GRID-ID
SBKA	1ST HIGHEST VALUE IS	1.36581 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	1.36540 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	1.35703 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	1.34535 AT (	323750.00,	3920250.00,	263.70,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	1.33756 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	1.31754 AT (	323500.00,	3920250.00,	259.10,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	1.30590 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	1.30016 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	1.28351 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	1.27842 AT (	323750.00,	3920000.00,	259.50,	0.00)	DC	NA
SAKA	1ST HIGHEST VALUE IS	1.00559 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.97836 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.96492 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.95919 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.95126 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.94851 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.92997 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.92493 AT (	323750.00,	3920250.00,	263.70,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.92355 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.90089 AT (	325500.00,	3919750.00,	260.30,	0.00)	DC	NA

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*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                          ***
*** Model Executed on 07/20/04 at 11:47:49 ***
 Input File - C:\Sycamore\Sycamore7-20-04_87_NOXA.DTA

Output File - C:\Sycamore\Sycamore7-20-04_87_NOXA.LST

   Met File - C:\Sycamore\BFL87.asc

      Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
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*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.85600E+01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.85600E+01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.85600E+01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.85600E+01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.85600E+01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.85600E+01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.85600E+01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.85600E+01	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.85600E+01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.85600E+01	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF NOXA IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
SYCBFR	1ST HIGHEST VALUE IS	1.13416 AT (320014.41, 3924017.50, 224.10, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	1.12837 AT (320014.41, 3924042.50, 225.00, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	1.12626 AT (319900.00, 3923900.00, 220.50, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	1.12153 AT (319989.41, 3924042.50, 224.10, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	1.12085 AT (319989.41, 3924017.50, 222.70, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	1.12056 AT (320014.41, 3923992.50, 221.60, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	1.11507 AT (319939.41, 3924092.50, 226.00, 0.00)	DC	NA
	8TH HIGHEST VALUE IS	1.11359 AT (319939.41, 3924117.50, 227.50, 0.00)	DC	NA
	9TH HIGHEST VALUE IS	1.11165 AT (319964.41, 3924092.50, 226.00, 0.00)	DC	NA
	10TH HIGHEST VALUE IS	1.11164 AT (319914.41, 3924092.50, 225.50, 0.00)	DC	NA
SYCAFTR	1ST HIGHEST VALUE IS	0.63755 AT (323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.61571 AT (323500.00, 3920250.00, 259.10, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.60546 AT (325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.60340 AT (324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.59758 AT (323750.00, 3920000.00, 259.50, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.59710 AT (324000.00, 3920000.00, 254.60, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.58841 AT (325000.00, 3920750.00, 262.60, 0.00)	DC	NA

	8TH HIGHEST VALUE IS	0.58520 AT (	320014.41,	3924017.50,	224.10,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.58368 AT (	323500.00,	3920000.00,	257.60,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.58195 AT (	320014.41,	3924042.50,	225.00,	0.00)	DC	NA
KRCCAFTR	1ST HIGHEST VALUE IS	0.61732 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.58247 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.54551 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.50521 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.49899 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.49775 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.49681 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.49444 AT (	322500.00,	3923000.00,	205.30,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.49402 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.48737 AT (	322500.00,	3923250.00,	214.00,	0.00)	DC	NA

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF NOXA IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF	TYPE	NETWORK GRID-ID
SBKA	1ST HIGHEST VALUE IS	1.52412 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	1.51876 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	1.49780 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	1.48535 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	1.45145 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	1.43917 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	1.43745 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	1.42460 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	1.42283 AT (	323750.00,	3920250.00,	263.70,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	1.38181 AT (	325250.00,	3921000.00,	255.70,	0.00)	DC	NA
SAKA	1ST HIGHEST VALUE IS	1.12048 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	1.09949 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	1.08683 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	1.08522 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	1.06679 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	1.06068 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	1.04149 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	1.03916 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	1.00856 AT (	325250.00,	3921000.00,	255.70,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	1.00461 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA

```
*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                          ***
*** Model Executed on 07/20/04 at 11:51:19 ***
 Input File - C:\Sycamore\Sycamore7-20-04_88_NOXA.DTA

Output File - C:\Sycamore\Sycamore7-20-04_88_NOXA.LST

   Met File - C:\Sycamore\BFL88.asc

      Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
```

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.85600E+01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.85600E+01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.85600E+01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.85600E+01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.85600E+01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.85600E+01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.85600E+01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.85600E+01	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.85600E+01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.85600E+01	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF MAXIMUM PERIOD (8784 HRS) RESULTS ***

** CONC OF NOXA IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
SYCBFR	1ST HIGHEST VALUE IS	1.15147 AT	(325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	1.13815 AT	(320014.41, 3924042.50, 225.00, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	1.13630 AT	(319964.41, 3924117.50, 227.40, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	1.13541 AT	(324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	1.13408 AT	(319939.41, 3924117.50, 227.50, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	1.13260 AT	(320014.41, 3924017.50, 224.10, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	1.12860 AT	(319984.81, 3924121.00, 226.80, 0.00)	DC	NA
	8TH HIGHEST VALUE IS	1.12800 AT	(323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	9TH HIGHEST VALUE IS	1.12696 AT	(319964.41, 3924092.50, 226.00, 0.00)	DC	NA
	10TH HIGHEST VALUE IS	1.12662 AT	(319989.41, 3924092.50, 225.70, 0.00)	DC	NA
SYCAFTR	1ST HIGHEST VALUE IS	0.68045 AT	(325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.66741 AT	(324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.66233 AT	(325000.00, 3921000.00, 271.30, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.66109 AT	(323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.65802 AT	(325000.00, 3920750.00, 262.60, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.65155 AT	(325250.00, 3920500.00, 255.20, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.64909 AT	(325250.00, 3920250.00, 258.30, 0.00)	DC	NA

	8TH HIGHEST VALUE IS	0.63928 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.63406 AT (	323500.00,	3920250.00,	259.10,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.62165 AT (	324000.00,	3920000.00,	254.60,	0.00)	DC	NA
KRCCAFTR	1ST HIGHEST VALUE IS	0.71516 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.70088 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.58371 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.56436 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.54788 AT (	325250.00,	3922000.00,	272.20,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.54334 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.52928 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.51387 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.51192 AT (	325250.00,	3922250.00,	271.90,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.50506 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA

*** THE SUMMARY OF MAXIMUM PERIOD (8784 HRS) RESULTS ***

** CONC OF NOXA IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF	TYPE	NETWORK GRID-ID
SBKA	1ST HIGHEST VALUE IS	1.71337 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	1.70393 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	1.65652 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	1.62909 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	1.61417 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	1.60828 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	1.59656 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	1.56217 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	1.56077 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	1.55975 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
SAKA	1ST HIGHEST VALUE IS	1.30408 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	1.24604 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	1.23903 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	1.18550 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	1.17188 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	1.16856 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	1.14732 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	1.14238 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	1.12857 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	1.12256 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA

*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant ***
*** Model Executed on 07/20/04 at 11:54:51 ***
Input File - C:\Sycamore\Sycamore7-20-04_89_NOXA.DTA

Output File - C:\Sycamore\Sycamore7-20-04_89_NOXA.LST

Met File - C:\Sycamore\BFL89.asc

Number of sources - 10
Number of source groups - 5
Number of receptors - 13966

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.85600E+01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.85600E+01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.85600E+01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.85600E+01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.85600E+01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.85600E+01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.85600E+01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.85600E+01	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.85600E+01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.85600E+01	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF NOXA IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
SYCBFR	1ST HIGHEST VALUE IS	1.12426 AT (320014.41, 3924017.50, 224.10, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	1.12400 AT (320014.41, 3924042.50, 225.00, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	1.11766 AT (319939.41, 3924117.50, 227.50, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	1.11509 AT (319964.41, 3924117.50, 227.40, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	1.11388 AT (319989.41, 3924042.50, 224.10, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	1.11289 AT (319939.41, 3924092.50, 226.00, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	1.11258 AT (319964.41, 3924092.50, 226.00, 0.00)	DC	NA
	8TH HIGHEST VALUE IS	1.10824 AT (319989.41, 3924067.50, 224.60, 0.00)	DC	NA
	9TH HIGHEST VALUE IS	1.10791 AT (319989.41, 3924092.50, 225.70, 0.00)	DC	NA
	10TH HIGHEST VALUE IS	1.10751 AT (319989.41, 3924017.50, 222.70, 0.00)	DC	NA
SYCAFTR	1ST HIGHEST VALUE IS	0.61994 AT (324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.61572 AT (323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.61442 AT (325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.59483 AT (323500.00, 3920250.00, 259.10, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.59259 AT (325250.00, 3920250.00, 258.30, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.58759 AT (325000.00, 3920750.00, 262.60, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.58466 AT (325500.00, 3919750.00, 260.30, 0.00)	DC	NA

	8TH HIGHEST VALUE IS	0.58385 AT (	320014.41,	3924017.50,	224.10,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.58350 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.58328 AT (	320014.41,	3924042.50,	225.00,	0.00)	DC	NA
KRCCAFTR	1ST HIGHEST VALUE IS	0.61978 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.60856 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.56311 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.51343 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.49932 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.49203 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.48782 AT (	322500.00,	3923250.00,	214.00,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.48516 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.48355 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.47956 AT (	322500.00,	3923000.00,	205.30,	0.00)	DC	NA

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF NOXA IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF	TYPE	NETWORK GRID-ID
SBKA	1ST HIGHEST VALUE IS	1.53619 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	1.51936 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	1.49175 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	1.48885 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	1.47571 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	1.45629 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	1.44128 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	1.43041 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	1.38992 AT (	325250.00,	3920000.00,	254.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	1.38545 AT (	325500.00,	3919750.00,	260.30,	0.00)	DC	NA
SAKA	1ST HIGHEST VALUE IS	1.14005 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	1.12626 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	1.09958 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	1.08691 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	1.07431 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	1.06245 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	1.04018 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	1.04005 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	1.03825 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	1.00503 AT (	325250.00,	3921000.00,	255.70,	0.00)	DC	NA

```
*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                          ***
*** Model Executed on 07/20/04 at 11:58:06 ***
 Input File - C:\Sycamore\Sycamore7-20-04_90_NOXA.DTA

Output File - C:\Sycamore\Sycamore7-20-04_90_NOXA.LST

   Met File - C:\Sycamore\BFL90.asc

      Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
```

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.85600E+01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.85600E+01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.85600E+01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.85600E+01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.85600E+01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.85600E+01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.85600E+01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.85600E+01	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.85600E+01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.85600E+01	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF NOXA IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
SYCBFR	1ST HIGHEST VALUE IS	1.13948 AT	(323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	1.11653 AT	(323500.00, 3920250.00, 259.10, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	1.08626 AT	(324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	1.08043 AT	(325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	1.08033 AT	(323750.00, 3920000.00, 259.50, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	1.07805 AT	(324000.00, 3920000.00, 254.60, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	1.05918 AT	(320014.41, 3924042.50, 225.00, 0.00)	DC	NA
	8TH HIGHEST VALUE IS	1.05778 AT	(320014.41, 3924017.50, 224.10, 0.00)	DC	NA
	9TH HIGHEST VALUE IS	1.05254 AT	(319939.41, 3924117.50, 227.50, 0.00)	DC	NA
	10TH HIGHEST VALUE IS	1.05182 AT	(319964.41, 3924117.50, 227.40, 0.00)	DC	NA
SYCAFTR	1ST HIGHEST VALUE IS	0.66583 AT	(323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.63558 AT	(323500.00, 3920250.00, 259.10, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.63543 AT	(324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.63363 AT	(325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.62450 AT	(324000.00, 3920000.00, 254.60, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.61753 AT	(323750.00, 3920000.00, 259.50, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.60823 AT	(325250.00, 3920250.00, 258.30, 0.00)	DC	NA

	8TH HIGHEST VALUE IS	0.60492 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.60236 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.60201 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
KRCCAFTR	1ST HIGHEST VALUE IS	0.65964 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.64089 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.56319 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.52092 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.51313 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.50747 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.50633 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.50546 AT (	325250.00,	3922000.00,	272.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.49419 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.47110 AT (	325250.00,	3921000.00,	255.70,	0.00)	DC	NA

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF NOXA IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF	TYPE	NETWORK GRID-ID
SBKA	1ST HIGHEST VALUE IS	1.58794 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	1.58790 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	1.56121 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	1.55431 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	1.54079 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	1.50496 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	1.50333 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	1.48349 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	1.46634 AT (	323750.00,	3920250.00,	263.70,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	1.45408 AT (	325250.00,	3920000.00,	254.20,	0.00)	DC	NA
SAKA	1ST HIGHEST VALUE IS	1.18573 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	1.16554 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	1.14110 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	1.11125 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	1.10349 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	1.10115 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	1.09648 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	1.07631 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	1.06814 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	1.04606 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA

```
*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                          ***
*** Model Executed on 07/20/04 at 12:37:59 ***
 Input File - C:\Sycamore\Sycamore7-20-04_86_PM.DTA

Output File - C:\Sycamore\Sycamore7-20-04_86_PM.LST

   Met File - C:\Sycamore\BFL86.asc

     Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
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*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.63000E+00	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.63000E+00	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.63000E+00	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.63000E+00	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.63000E+00	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.63000E+00	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.63000E+00	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.63000E+00	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.63000E+00	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.63000E+00	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF PM IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
SYCBFR	1ST HIGHEST VALUE IS 0.07620	AT (320014.41, 3924017.50, 224.10, 0.00)	DC	NA
	2ND HIGHEST VALUE IS 0.07603	AT (320014.41, 3924042.50, 225.00, 0.00)	DC	NA
	3RD HIGHEST VALUE IS 0.07532	AT (319989.41, 3924042.50, 224.10, 0.00)	DC	NA
	4TH HIGHEST VALUE IS 0.07503	AT (320014.41, 3923992.50, 221.60, 0.00)	DC	NA
	5TH HIGHEST VALUE IS 0.07502	AT (319989.41, 3924017.50, 222.70, 0.00)	DC	NA
	6TH HIGHEST VALUE IS 0.07489	AT (319939.41, 3924117.50, 227.50, 0.00)	DC	NA
	7TH HIGHEST VALUE IS 0.07481	AT (319964.41, 3924092.50, 226.00, 0.00)	DC	NA
	8TH HIGHEST VALUE IS 0.07480	AT (319939.41, 3924092.50, 226.00, 0.00)	DC	NA
	9TH HIGHEST VALUE IS 0.07476	AT (319989.41, 3924067.50, 224.60, 0.00)	DC	NA
	10TH HIGHEST VALUE IS 0.07471	AT (319964.41, 3924117.50, 227.40, 0.00)	DC	NA
SYCAFTR	1ST HIGHEST VALUE IS 0.04231	AT (323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	2ND HIGHEST VALUE IS 0.04091	AT (323500.00, 3920250.00, 259.10, 0.00)	DC	NA
	3RD HIGHEST VALUE IS 0.04043	AT (324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	4TH HIGHEST VALUE IS 0.04041	AT (323500.00, 3920000.00, 257.60, 0.00)	DC	NA
	5TH HIGHEST VALUE IS 0.03977	AT (324000.00, 3920000.00, 254.60, 0.00)	DC	NA
	6TH HIGHEST VALUE IS 0.03972	AT (323750.00, 3919750.00, 256.00, 0.00)	DC	NA
	7TH HIGHEST VALUE IS 0.03971	AT (323750.00, 3920000.00, 259.50, 0.00)	DC	NA

	8TH HIGHEST VALUE IS	0.03958 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.03908 AT (	320014.41,	3924017.50,	224.10,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.03896 AT (	320014.41,	3924042.50,	225.00,	0.00)	DC	NA
KRCCAFTR	1ST HIGHEST VALUE IS	0.04014 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.03774 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.03727 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.03408 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.03380 AT (	322500.00,	3923250.00,	214.00,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.03345 AT (	322500.00,	3923000.00,	205.30,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.03326 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.03276 AT (	322750.00,	3923000.00,	203.00,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.03267 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.03253 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF PM IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF	TYPE	NETWORK GRID-ID
SBKA	1ST HIGHEST VALUE IS	0.10052 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.10049 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.09987 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.09902 AT (	323750.00,	3920250.00,	263.70,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.09844 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.09697 AT (	323500.00,	3920250.00,	259.10,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.09611 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.09569 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.09446 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.09409 AT (	323750.00,	3920000.00,	259.50,	0.00)	DC	NA
SAKA	1ST HIGHEST VALUE IS	0.07401 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.07201 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.07102 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.07059 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.07001 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.06981 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.06844 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.06807 AT (	323750.00,	3920250.00,	263.70,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.06797 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.06630 AT (	325500.00,	3919750.00,	260.30,	0.00)	DC	NA

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF	TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.79382b	ON 86012424: AT (	320750.00,	3928500.00,	348.70,	0.00)	DC	
	HIGH 2ND HIGH VALUE IS	0.66065b	ON 86111124: AT (	318000.00,	3929500.00,	345.10,	0.00)	DC	
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.49618b	ON 86012424: AT (	320750.00,	3928500.00,	348.70,	0.00)	DC	
	HIGH 2ND HIGH VALUE IS	0.43554b	ON 86111124: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC	
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.40844m	ON 86082924: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC	
	HIGH 2ND HIGH VALUE IS	0.29624m	ON 86052424: AT (	328000.00,	3928750.00,	441.80,	0.00)	DC	
SBKA	HIGH 1ST HIGH VALUE IS	0.93828b	ON 86111124: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC	
	HIGH 2ND HIGH VALUE IS	0.81884b	ON 86111124: AT (	318250.00,	3930250.00,	348.50,	0.00)	DC	
SAKA	HIGH 1ST HIGH VALUE IS	0.72443b	ON 86111124: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC	
	HIGH 2ND HIGH VALUE IS	0.56922b	ON 86103124: AT (	318250.00,	3930250.00,	348.50,	0.00)	DC	

*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant ***
*** Model Executed on 07/20/04 at 12:41:22 ***
Input File - C:\Sycamore\Sycamore7-20-04_87_PM.DTA

Output File - C:\Sycamore\Sycamore7-20-04_87_PM.LST

Met File - C:\Sycamore\BFL87.asc

Number of sources - 10
Number of source groups - 5
Number of receptors - 13966

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.63000E+00	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.63000E+00	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.63000E+00	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.63000E+00	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.63000E+00	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.63000E+00	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.63000E+00	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.63000E+00	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.63000E+00	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.63000E+00	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF PM IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
SYCBFR	1ST HIGHEST VALUE IS	0.08347 AT (320014.41, 3924017.50, 224.10, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.08305 AT (320014.41, 3924042.50, 225.00, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.08289 AT (319900.00, 3923900.00, 220.50, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.08254 AT (319989.41, 3924042.50, 224.10, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.08249 AT (319989.41, 3924017.50, 222.70, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.08247 AT (320014.41, 3923992.50, 221.60, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.08207 AT (319939.41, 3924092.50, 226.00, 0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.08196 AT (319939.41, 3924117.50, 227.50, 0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.08181 AT (319964.41, 3924092.50, 226.00, 0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.08181 AT (319914.41, 3924092.50, 225.50, 0.00)	DC	NA
SYCAFTR	1ST HIGHEST VALUE IS	0.04692 AT (323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.04531 AT (323500.00, 3920250.00, 259.10, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.04456 AT (325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.04441 AT (324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.04398 AT (323750.00, 3920000.00, 259.50, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.04395 AT (324000.00, 3920000.00, 254.60, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.04331 AT (325000.00, 3920750.00, 262.60, 0.00)	DC	NA

	8TH HIGHEST VALUE IS	0.04307 AT (	320014.41,	3924017.50,	224.10,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.04296 AT (	323500.00,	3920000.00,	257.60,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.04283 AT (	320014.41,	3924042.50,	225.00,	0.00)	DC	NA
KRCCAFTR	1ST HIGHEST VALUE IS	0.04543 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.04287 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.04015 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.03718 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.03672 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.03663 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.03656 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.03639 AT (	322500.00,	3923000.00,	205.30,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.03636 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.03587 AT (	322500.00,	3923250.00,	214.00,	0.00)	DC	NA

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF PM IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE	NETWORK GRID-ID
SBKA	1ST HIGHEST VALUE IS	0.11217 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.11178 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.11023 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.10932 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.10682 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.10592 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.10579 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.10485 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.10472 AT (	323750.00,	3920250.00,	263.70,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.10170 AT (	325250.00,	3921000.00,	255.70,	0.00)	DC	NA
SAKA	1ST HIGHEST VALUE IS	0.08247 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.08092 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.07999 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.07987 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.07851 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.07806 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.07665 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.07648 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.07423 AT (	325250.00,	3921000.00,	255.70,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.07394 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.74457m	ON 87080924: AT (	324750.00,	3929500.00,	373.40,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.61363m	ON 87022224: AT (	318750.00,	3928000.00,	322.30,	0.00)	DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.53363m	ON 87080924: AT (	325000.00,	3929500.00,	382.80,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.38684b	ON 87011424: AT (	318750.00,	3928500.00,	328.90,	0.00)	DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.52835m	ON 87080924: AT (	328000.00,	3928750.00,	441.80,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.36880b	ON 87011424: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SBKA	HIGH 1ST HIGH VALUE IS	1.11896m	ON 87080924: AT (	327000.00,	3928750.00,	392.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.62342b	ON 87122524: AT (	325000.00,	3929500.00,	382.80,	0.00)	DC
SAKA	HIGH 1ST HIGH VALUE IS	0.97692m	ON 87080924: AT (	327000.00,	3928750.00,	392.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.53582b	ON 87122524: AT (	325000.00,	3929500.00,	382.80,	0.00)	DC

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*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                          ***
*** Model Executed on 07/20/04 at 12:45:02 ***
 Input File - C:\Sycamore\Sycamore7-20-04_88_PM.DTA

Output File - C:\Sycamore\Sycamore7-20-04_88_PM.LST

   Met File - C:\Sycamore\BFL88.asc

      Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
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*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.63000E+00	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.63000E+00	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.63000E+00	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.63000E+00	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.63000E+00	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.63000E+00	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.63000E+00	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.63000E+00	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.63000E+00	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.63000E+00	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF MAXIMUM PERIOD (8784 HRS) RESULTS ***

** CONC OF PM IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
SYCBFR	1ST HIGHEST VALUE IS	0.08475 AT (325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.08377 AT (320014.41, 3924042.50, 225.00, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.08363 AT (319964.41, 3924117.50, 227.40, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.08356 AT (324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.08347 AT (319939.41, 3924117.50, 227.50, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.08336 AT (320014.41, 3924017.50, 224.10, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.08306 AT (319984.81, 3924121.00, 226.80, 0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.08302 AT (323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.08294 AT (319964.41, 3924092.50, 226.00, 0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.08292 AT (319989.41, 3924092.50, 225.70, 0.00)	DC	NA
SYCAFTR	1ST HIGHEST VALUE IS	0.05008 AT (325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.04912 AT (324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.04875 AT (325000.00, 3921000.00, 271.30, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.04866 AT (323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.04843 AT (325000.00, 3920750.00, 262.60, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.04795 AT (325250.00, 3920500.00, 255.20, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.04777 AT (325250.00, 3920250.00, 258.30, 0.00)	DC	NA

	8TH HIGHEST VALUE IS	0.04705 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.04667 AT (	323500.00,	3920250.00,	259.10,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.04575 AT (	324000.00,	3920000.00,	254.60,	0.00)	DC	NA
KRCCAFTR	1ST HIGHEST VALUE IS	0.05263 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.05158 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.04296 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.04154 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.04032 AT (	325250.00,	3922000.00,	272.20,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.03999 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.03895 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.03782 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.03768 AT (	325250.00,	3922250.00,	271.90,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.03717 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA

*** THE SUMMARY OF MAXIMUM PERIOD (8784 HRS) RESULTS ***

** CONC OF PM IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE	NETWORK GRID-ID
SBKA	1ST HIGHEST VALUE IS	0.12610 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.12541 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.12192 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.11990 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.11880 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.11837 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.11750 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.11497 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.11487 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.11479 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
SAKA	1ST HIGHEST VALUE IS	0.09598 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.09171 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.09119 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.08725 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.08625 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.08600 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.08444 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.08408 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.08306 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.08262 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)		RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.69269b	ON 88021024:	AT (	318750.00,	3928500.00,	328.90,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.48369b	ON 88080424:	AT (	318000.00,	3929500.00,	345.10,	0.00)	DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.43769b	ON 88021024:	AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.31681b	ON 88080424:	AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.42095b	ON 88021024:	AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.27701m	ON 88091124:	AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
SBKA	HIGH 1ST HIGH VALUE IS	0.83466b	ON 88021024:	AT (	318750.00,	3928500.00,	328.90,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.64911m	ON 88091124:	AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
SAKA	HIGH 1ST HIGH VALUE IS	0.61484b	ON 88021024:	AT (	319500.00,	3930000.00,	344.10,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.53194m	ON 88091124:	AT (	318000.00,	3930250.00,	360.70,	0.00)	DC

*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant ***
*** Model Executed on 07/20/04 at 12:48:46 ***
Input File - C:\Sycamore\Sycamore7-20-04_89_PM.DTA

Output File - C:\Sycamore\Sycamore7-20-04_89_PM.LST

Met File - C:\Sycamore\BFL89.asc

Number of sources - 10
Number of source groups - 5
Number of receptors - 13966

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.63000E+00	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.63000E+00	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.63000E+00	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.63000E+00	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.63000E+00	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.63000E+00	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.63000E+00	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.63000E+00	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.63000E+00	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.63000E+00	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF PM IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
SYCBFR	1ST HIGHEST VALUE IS	0.08274 AT (320014.41, 3924017.50, 224.10, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.08272 AT (320014.41, 3924042.50, 225.00, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.08226 AT (319939.41, 3924117.50, 227.50, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.08207 AT (319964.41, 3924117.50, 227.40, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.08198 AT (319989.41, 3924042.50, 224.10, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.08191 AT (319939.41, 3924092.50, 226.00, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.08188 AT (319964.41, 3924092.50, 226.00, 0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.08156 AT (319989.41, 3924067.50, 224.60, 0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.08154 AT (319989.41, 3924092.50, 225.70, 0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.08151 AT (319989.41, 3924017.50, 222.70, 0.00)	DC	NA
SYCAFTR	1ST HIGHEST VALUE IS	0.04563 AT (324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.04532 AT (323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.04522 AT (325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.04378 AT (323500.00, 3920250.00, 259.10, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.04361 AT (325250.00, 3920250.00, 258.30, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.04325 AT (325000.00, 3920750.00, 262.60, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.04303 AT (325500.00, 3919750.00, 260.30, 0.00)	DC	NA

	8TH HIGHEST VALUE IS	0.04297 AT (	320014.41,	3924017.50,	224.10,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.04294 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.04293 AT (	320014.41,	3924042.50,	225.00,	0.00)	DC	NA
KRCCAFTR	1ST HIGHEST VALUE IS	0.04561 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.04479 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.04144 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.03779 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.03675 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.03621 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.03590 AT (	322500.00,	3923250.00,	214.00,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.03571 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.03559 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.03529 AT (	322500.00,	3923000.00,	205.30,	0.00)	DC	NA

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF PM IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE	NETWORK GRID-ID
SBKA	1ST HIGHEST VALUE IS	0.11306 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.11182 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.10979 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.10958 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.10861 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.10718 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.10608 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.10527 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.10230 AT (	325250.00,	3920000.00,	254.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.10197 AT (	325500.00,	3919750.00,	260.30,	0.00)	DC	NA
SAKA	1ST HIGHEST VALUE IS	0.08391 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.08289 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.08093 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.07999 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.07907 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.07819 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.07656 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.07655 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.07641 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.07397 AT (	325250.00,	3921000.00,	255.70,	0.00)	DC	NA

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.60240m	ON 89020824: AT (	316900.00,	3926400.00,	276.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.47672b	ON 89122524: AT (	317250.00,	3930750.00,	348.10,	0.00)	DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.36038b	ON 89122524: AT (	317500.00,	3930250.00,	348.90,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.32130b	ON 89122524: AT (	317250.00,	3930750.00,	348.10,	0.00)	DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.35475m	ON 89122024: AT (	317500.00,	3930250.00,	348.90,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.27751b	ON 89122524: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
SBKA	HIGH 1ST HIGH VALUE IS	0.80216m	ON 89122024: AT (	317250.00,	3930750.00,	348.10,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.67732b	ON 89122524: AT (	317250.00,	3930750.00,	348.10,	0.00)	DC
SAKA	HIGH 1ST HIGH VALUE IS	0.64441m	ON 89122024: AT (	317250.00,	3930750.00,	348.10,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.52512m	ON 89122024: AT (	317500.00,	3930250.00,	348.90,	0.00)	DC

*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant ***
*** Model Executed on 07/20/04 at 12:52:11 ***
Input File - C:\Sycamore\Sycamore7-20-04_90_PM.DTA

Output File - C:\Sycamore\Sycamore7-20-04_90_PM.LST

Met File - C:\Sycamore\BFL90.asc

Number of sources - 10
Number of source groups - 5
Number of receptors - 13966

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.63000E+00	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.63000E+00	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.63000E+00	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.63000E+00	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.63000E+00	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.63000E+00	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.63000E+00	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.63000E+00	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.63000E+00	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.63000E+00	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF PM IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
SYCBFR	1ST HIGHEST VALUE IS	0.08386 AT (323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.08217 AT (323500.00, 3920250.00, 259.10, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.07995 AT (324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.07952 AT (325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.07951 AT (323750.00, 3920000.00, 259.50, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.07934 AT (324000.00, 3920000.00, 254.60, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.07795 AT (320014.41, 3924042.50, 225.00, 0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.07785 AT (320014.41, 3924017.50, 224.10, 0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.07746 AT (319939.41, 3924117.50, 227.50, 0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.07741 AT (319964.41, 3924117.50, 227.40, 0.00)	DC	NA
SYCAFTR	1ST HIGHEST VALUE IS	0.04900 AT (323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.04678 AT (323500.00, 3920250.00, 259.10, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.04677 AT (324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.04663 AT (325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.04596 AT (324000.00, 3920000.00, 254.60, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.04545 AT (323750.00, 3920000.00, 259.50, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.04476 AT (325250.00, 3920250.00, 258.30, 0.00)	DC	NA

	8TH HIGHEST VALUE IS	0.04452 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.04433 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.04431 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
KRCCAFTR	1ST HIGHEST VALUE IS	0.04855 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.04717 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.04145 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.03834 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.03777 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.03735 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.03727 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.03720 AT (	325250.00,	3922000.00,	272.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.03637 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.03467 AT (	325250.00,	3921000.00,	255.70,	0.00)	DC	NA

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF PM IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE	NETWORK GRID-ID
SBKA	1ST HIGHEST VALUE IS	0.11687 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.11687 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.11490 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.11439 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.11340 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.11076 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.11064 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.10918 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.10792 AT (	323750.00,	3920250.00,	263.70,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.10702 AT (	325250.00,	3920000.00,	254.20,	0.00)	DC	NA
SAKA	1ST HIGHEST VALUE IS	0.08727 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.08578 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.08398 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.08179 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.08121 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.08104 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.08070 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.07921 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.07861 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.07699 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.81418b	ON 90021024: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.49248b	ON 90122024: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.53668b	ON 90021024: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.32661b	ON 90122024: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.35833b	ON 90021024: AT (	322250.00,	3929500.00,	363.90,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.25076b	ON 90112724: AT (	318000.00,	3929500.00,	345.10,	0.00)	DC
SBKA	HIGH 1ST HIGH VALUE IS	1.00719b	ON 90021024: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.59029m	ON 90080424: AT (	317500.00,	3930250.00,	348.90,	0.00)	DC
SAKA	HIGH 1ST HIGH VALUE IS	0.75406b	ON 90021024: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.46310b	ON 90022724: AT (	318250.00,	3930250.00,	348.50,	0.00)	DC

*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant ***
*** Model Executed on 07/20/04 at 12:55:53 ***
Input File - C:\Sycamore\Sycamore7-20-04_86_SO2.DTA

Output File - C:\Sycamore\Sycamore7-20-04_86_SO2.LST

Met File - C:\Sycamore\BFL86.asc

Number of sources - 10
Number of source groups - 5
Number of receptors - 13966

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.63000E-01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.63000E-01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.63000E-01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.63000E-01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.63000E-01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.63000E-01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.63000E-01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.63000E-01	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.63000E-01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.63000E-01	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF	TYPE	NETWORK GRID-ID
SYCBFR	1ST HIGHEST VALUE IS 0.00762	AT (320014.41, 3924017.50, 224.10, 0.00)	DC		NA
	2ND HIGHEST VALUE IS 0.00760	AT (320014.41, 3924042.50, 225.00, 0.00)	DC		NA
	3RD HIGHEST VALUE IS 0.00753	AT (319989.41, 3924042.50, 224.10, 0.00)	DC		NA
	4TH HIGHEST VALUE IS 0.00750	AT (320014.41, 3923992.50, 221.60, 0.00)	DC		NA
	5TH HIGHEST VALUE IS 0.00750	AT (319989.41, 3924017.50, 222.70, 0.00)	DC		NA
	6TH HIGHEST VALUE IS 0.00749	AT (319939.41, 3924117.50, 227.50, 0.00)	DC		NA
	7TH HIGHEST VALUE IS 0.00748	AT (319964.41, 3924092.50, 226.00, 0.00)	DC		NA
	8TH HIGHEST VALUE IS 0.00748	AT (319939.41, 3924092.50, 226.00, 0.00)	DC		NA
	9TH HIGHEST VALUE IS 0.00748	AT (319989.41, 3924067.50, 224.60, 0.00)	DC		NA
	10TH HIGHEST VALUE IS 0.00747	AT (319964.41, 3924117.50, 227.40, 0.00)	DC		NA
SYCAFTR	1ST HIGHEST VALUE IS 0.00423	AT (323750.00, 3920250.00, 263.70, 0.00)	DC		NA
	2ND HIGHEST VALUE IS 0.00409	AT (323500.00, 3920250.00, 259.10, 0.00)	DC		NA
	3RD HIGHEST VALUE IS 0.00404	AT (324750.00, 3920500.00, 255.00, 0.00)	DC		NA
	4TH HIGHEST VALUE IS 0.00404	AT (323500.00, 3920000.00, 257.60, 0.00)	DC		NA
	5TH HIGHEST VALUE IS 0.00398	AT (324000.00, 3920000.00, 254.60, 0.00)	DC		NA
	6TH HIGHEST VALUE IS 0.00397	AT (323750.00, 3919750.00, 256.00, 0.00)	DC		NA
	7TH HIGHEST VALUE IS 0.00397	AT (323750.00, 3920000.00, 259.50, 0.00)	DC		NA

	8TH HIGHEST VALUE IS	0.00396 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.00391 AT (	320014.41,	3924017.50,	224.10,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.00390 AT (	320014.41,	3924042.50,	225.00,	0.00)	DC	NA
KRCCAFTR	1ST HIGHEST VALUE IS	0.00401 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.00377 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.00373 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.00341 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.00338 AT (	322500.00,	3923250.00,	214.00,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.00334 AT (	322500.00,	3923000.00,	205.30,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.00333 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.00328 AT (	322750.00,	3923000.00,	203.00,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.00327 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.00325 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE	NETWORK GRID-ID
SBKA	1ST HIGHEST VALUE IS	0.01005 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.01005 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.00999 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.00990 AT (	323750.00,	3920250.00,	263.70,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.00984 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.00970 AT (	323500.00,	3920250.00,	259.10,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.00961 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.00957 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.00945 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.00941 AT (	323750.00,	3920000.00,	259.50,	0.00)	DC	NA
SAKA	1ST HIGHEST VALUE IS	0.00740 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.00720 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.00710 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.00706 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.00700 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.00698 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.00684 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.00681 AT (	323750.00,	3920250.00,	263.70,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.00680 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.00663 AT (	325500.00,	3919750.00,	260.30,	0.00)	DC	NA

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.91734	ON 86082905: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.90102	ON 86121518: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.59246	ON 86121518: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.59211	ON 86012420: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.45331	ON 86082905: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.44339	ON 86120320: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SBKA	HIGH 1ST HIGH VALUE IS	1.37065	ON 86082905: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	1.05616	ON 86012420: AT (	322250.00,	3929500.00,	363.90,	0.00)	DC
SAKA	HIGH 1ST HIGH VALUE IS	0.98215	ON 86082905: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.82975	ON 86012420: AT (	322250.00,	3929500.00,	363.90,	0.00)	DC

*** THE SUMMARY OF HIGHEST 3-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.46572c	ON 86012421: AT (	320750.00,	3928500.00,	348.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.30034	ON 86121518: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.29237c	ON 86012421: AT (	320750.00,	3928500.00,	348.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.19737c	ON 86012421: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.20196	ON 86103118: AT (	320250.00,	3929500.00,	356.10,	0.00)	DC

	HIGH	2ND HIGH VALUE IS	0.14780	ON 86120321: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	0.50169c	ON 86012421: AT (	322250.00,	3929500.00,	363.90,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.36457m	ON 86032306: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	0.37531c	ON 86012421: AT (	322250.00,	3929500.00,	363.90,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.27680	ON 86121518: AT (	322250.00,	3929500.00,	363.90,	0.00)	DC

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.07938b	ON 86012424: AT (	320750.00,	3928500.00,	348.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.06607b	ON 86111124: AT (	318000.00,	3929500.00,	345.10,	0.00)	DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.04962b	ON 86012424: AT (	320750.00,	3928500.00,	348.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.04355b	ON 86111124: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.04084m	ON 86082924: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.02962m	ON 86052424: AT (	328000.00,	3928750.00,	441.80,	0.00)	DC
SBKA	HIGH 1ST HIGH VALUE IS	0.09383b	ON 86111124: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.08188b	ON 86111124: AT (	318250.00,	3930250.00,	348.50,	0.00)	DC
SAKA	HIGH 1ST HIGH VALUE IS	0.07244b	ON 86111124: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.05692b	ON 86103124: AT (	318250.00,	3930250.00,	348.50,	0.00)	DC

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*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                          ***
*** Model Executed on 07/20/04 at 12:59:52 ***
 Input File - C:\Sycamore\Sycamore7-20-04_87_SO2.DTA

Output File - C:\Sycamore\Sycamore7-20-04_87_SO2.LST

   Met File - C:\Sycamore\BFL87.asc

     Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
```

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.63000E-01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.63000E-01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.63000E-01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.63000E-01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.63000E-01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.63000E-01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.63000E-01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.63000E-01	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.63000E-01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.63000E-01	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
SYCBFR	1ST HIGHEST VALUE IS 0.00835 AT (320014.41, 3924017.50, 224.10, 0.00)		DC	NA
	2ND HIGHEST VALUE IS 0.00830 AT (320014.41, 3924042.50, 225.00, 0.00)		DC	NA
	3RD HIGHEST VALUE IS 0.00829 AT (319900.00, 3923900.00, 220.50, 0.00)		DC	NA
	4TH HIGHEST VALUE IS 0.00825 AT (319989.41, 3924042.50, 224.10, 0.00)		DC	NA
	5TH HIGHEST VALUE IS 0.00825 AT (319989.41, 3924017.50, 222.70, 0.00)		DC	NA
	6TH HIGHEST VALUE IS 0.00825 AT (320014.41, 3923992.50, 221.60, 0.00)		DC	NA
	7TH HIGHEST VALUE IS 0.00821 AT (319939.41, 3924092.50, 226.00, 0.00)		DC	NA
	8TH HIGHEST VALUE IS 0.00820 AT (319939.41, 3924117.50, 227.50, 0.00)		DC	NA
	9TH HIGHEST VALUE IS 0.00818 AT (319964.41, 3924092.50, 226.00, 0.00)		DC	NA
	10TH HIGHEST VALUE IS 0.00818 AT (319914.41, 3924092.50, 225.50, 0.00)		DC	NA
SYCAFTR	1ST HIGHEST VALUE IS 0.00469 AT (323750.00, 3920250.00, 263.70, 0.00)		DC	NA
	2ND HIGHEST VALUE IS 0.00453 AT (323500.00, 3920250.00, 259.10, 0.00)		DC	NA
	3RD HIGHEST VALUE IS 0.00446 AT (325000.00, 3920500.00, 264.90, 0.00)		DC	NA
	4TH HIGHEST VALUE IS 0.00444 AT (324750.00, 3920500.00, 255.00, 0.00)		DC	NA
	5TH HIGHEST VALUE IS 0.00440 AT (323750.00, 3920000.00, 259.50, 0.00)		DC	NA
	6TH HIGHEST VALUE IS 0.00439 AT (324000.00, 3920000.00, 254.60, 0.00)		DC	NA
	7TH HIGHEST VALUE IS 0.00433 AT (325000.00, 3920750.00, 262.60, 0.00)		DC	NA

	8TH HIGHEST VALUE IS	0.00431 AT (	320014.41,	3924017.50,	224.10,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.00430 AT (	323500.00,	3920000.00,	257.60,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.00428 AT (	320014.41,	3924042.50,	225.00,	0.00)	DC	NA
KRCCAFTR	1ST HIGHEST VALUE IS	0.00454 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.00429 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.00401 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.00372 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.00367 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.00366 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.00366 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.00364 AT (	322500.00,	3923000.00,	205.30,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.00364 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.00359 AT (	322500.00,	3923250.00,	214.00,	0.00)	DC	NA

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE	NETWORK GRID-ID
SBKA	1ST HIGHEST VALUE IS	0.01122 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.01118 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.01102 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.01093 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.01068 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.01059 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.01058 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.01048 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.01047 AT (	323750.00,	3920250.00,	263.70,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.01017 AT (	325250.00,	3921000.00,	255.70,	0.00)	DC	NA
SAKA	1ST HIGHEST VALUE IS	0.00825 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.00809 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.00800 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.00799 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.00785 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.00781 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.00767 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.00765 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.00742 AT (	325250.00,	3921000.00,	255.70,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.00739 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.91734	ON 87092806: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.81726	ON 87041605: AT (	320250.00,	3929500.00,	356.10,	0.00)	DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.52884	ON 87092806: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.52622	ON 87032920: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.45331	ON 87092806: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.45041	ON 87041605: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SBKA	HIGH 1ST HIGH VALUE IS	1.37065	ON 87092806: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.93694	ON 87073105: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
SAKA	HIGH 1ST HIGH VALUE IS	0.98215	ON 87092806: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.78177	ON 87073105: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC

*** THE SUMMARY OF HIGHEST 3-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.36187	ON 87011421: AT (	318750.00,	3928000.00,	322.30,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.27435m	ON 87092806: AT (	320250.00,	3929500.00,	356.10,	0.00)	DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.24478m	ON 87080906: AT (	325000.00,	3929500.00,	382.80,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.17541c	ON 87032921: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.23748m	ON 87080906: AT (	328000.00,	3928750.00,	441.80,	0.00)	DC

	HIGH	2ND HIGH VALUE IS	0.15943m	ON 87072706:	AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	0.49225m	ON 87080906:	AT (	327000.00,	3928750.00,	392.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.35734	ON 87122518:	AT (	325000.00,	3929500.00,	382.80,	0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	0.43552m	ON 87080906:	AT (	327000.00,	3928750.00,	392.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.31154	ON 87122518:	AT (	325000.00,	3929500.00,	382.80,	0.00)	DC

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.07446m	ON 87080924:	AT (	324750.00,	3929500.00,	373.40,	0.00) DC
	HIGH 2ND HIGH VALUE IS	0.06136m	ON 87022224:	AT (	318750.00,	3928000.00,	322.30,	0.00) DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.05336m	ON 87080924:	AT (	325000.00,	3929500.00,	382.80,	0.00) DC
	HIGH 2ND HIGH VALUE IS	0.03868b	ON 87011424:	AT (	318750.00,	3928500.00,	328.90,	0.00) DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.05284m	ON 87080924:	AT (	328000.00,	3928750.00,	441.80,	0.00) DC
	HIGH 2ND HIGH VALUE IS	0.03688b	ON 87011424:	AT (	320500.00,	3929250.00,	364.70,	0.00) DC
SBKA	HIGH 1ST HIGH VALUE IS	0.11190m	ON 87080924:	AT (	327000.00,	3928750.00,	392.70,	0.00) DC
	HIGH 2ND HIGH VALUE IS	0.06234b	ON 87122524:	AT (	325000.00,	3929500.00,	382.80,	0.00) DC
SAKA	HIGH 1ST HIGH VALUE IS	0.09769m	ON 87080924:	AT (	327000.00,	3928750.00,	392.70,	0.00) DC
	HIGH 2ND HIGH VALUE IS	0.05358b	ON 87122524:	AT (	325000.00,	3929500.00,	382.80,	0.00) DC

```
*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                          ***
*** Model Executed on 07/20/04 at 13:04:06 ***
 Input File - C:\Sycamore\Sycamore7-20-04_88_SO2.DTA

Output File - C:\Sycamore\Sycamore7-20-04_88_SO2.LST

   Met File - C:\Sycamore\BFL88.asc

      Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
```

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.63000E-01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.63000E-01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.63000E-01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.63000E-01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.63000E-01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.63000E-01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.63000E-01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.63000E-01	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.63000E-01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.63000E-01	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF MAXIMUM PERIOD (8784 HRS) RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
SYCBFR	1ST HIGHEST VALUE IS 0.00847	AT (325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	2ND HIGHEST VALUE IS 0.00838	AT (320014.41, 3924042.50, 225.00, 0.00)	DC	NA
	3RD HIGHEST VALUE IS 0.00836	AT (319964.41, 3924117.50, 227.40, 0.00)	DC	NA
	4TH HIGHEST VALUE IS 0.00836	AT (324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	5TH HIGHEST VALUE IS 0.00835	AT (319939.41, 3924117.50, 227.50, 0.00)	DC	NA
	6TH HIGHEST VALUE IS 0.00834	AT (320014.41, 3924017.50, 224.10, 0.00)	DC	NA
	7TH HIGHEST VALUE IS 0.00831	AT (319984.81, 3924121.00, 226.80, 0.00)	DC	NA
	8TH HIGHEST VALUE IS 0.00830	AT (323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	9TH HIGHEST VALUE IS 0.00829	AT (319964.41, 3924092.50, 226.00, 0.00)	DC	NA
	10TH HIGHEST VALUE IS 0.00829	AT (319989.41, 3924092.50, 225.70, 0.00)	DC	NA
SYCAFTR	1ST HIGHEST VALUE IS 0.00501	AT (325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	2ND HIGHEST VALUE IS 0.00491	AT (324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	3RD HIGHEST VALUE IS 0.00487	AT (325000.00, 3921000.00, 271.30, 0.00)	DC	NA
	4TH HIGHEST VALUE IS 0.00487	AT (323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	5TH HIGHEST VALUE IS 0.00484	AT (325000.00, 3920750.00, 262.60, 0.00)	DC	NA
	6TH HIGHEST VALUE IS 0.00480	AT (325250.00, 3920500.00, 255.20, 0.00)	DC	NA
	7TH HIGHEST VALUE IS 0.00478	AT (325250.00, 3920250.00, 258.30, 0.00)	DC	NA

8TH HIGHEST VALUE IS	0.00470 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA	
9TH HIGHEST VALUE IS	0.00467 AT (	323500.00,	3920250.00,	259.10,	0.00)	DC	NA	
10TH HIGHEST VALUE IS	0.00458 AT (	324000.00,	3920000.00,	254.60,	0.00)	DC	NA	
KRCCAFTR 1ST HIGHEST VALUE IS	0.00526 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA	
2ND HIGHEST VALUE IS	0.00516 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA	
3RD HIGHEST VALUE IS	0.00430 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA	
4TH HIGHEST VALUE IS	0.00415 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA	
5TH HIGHEST VALUE IS	0.00403 AT (	325250.00,	3922000.00,	272.20,	0.00)	DC	NA	
6TH HIGHEST VALUE IS	0.00400 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA	
7TH HIGHEST VALUE IS	0.00390 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA	
8TH HIGHEST VALUE IS	0.00378 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA	
9TH HIGHEST VALUE IS	0.00377 AT (	325250.00,	3922250.00,	271.90,	0.00)	DC	NA	
10TH HIGHEST VALUE IS	0.00372 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA	

*** THE SUMMARY OF MAXIMUM PERIOD (8784 HRS) RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE	NETWORK GRID-ID
SBKA 1ST HIGHEST VALUE IS	0.01261 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
2ND HIGHEST VALUE IS	0.01254 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
3RD HIGHEST VALUE IS	0.01219 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
4TH HIGHEST VALUE IS	0.01199 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
5TH HIGHEST VALUE IS	0.01188 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
6TH HIGHEST VALUE IS	0.01184 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
7TH HIGHEST VALUE IS	0.01175 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
8TH HIGHEST VALUE IS	0.01150 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
9TH HIGHEST VALUE IS	0.01149 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
10TH HIGHEST VALUE IS	0.01148 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
SAKA 1ST HIGHEST VALUE IS	0.00960 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
2ND HIGHEST VALUE IS	0.00917 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
3RD HIGHEST VALUE IS	0.00912 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
4TH HIGHEST VALUE IS	0.00873 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
5TH HIGHEST VALUE IS	0.00862 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
6TH HIGHEST VALUE IS	0.00860 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
7TH HIGHEST VALUE IS	0.00844 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
8TH HIGHEST VALUE IS	0.00841 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
9TH HIGHEST VALUE IS	0.00831 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
10TH HIGHEST VALUE IS	0.00826 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR HIGH 1ST HIGH VALUE IS	0.80264	ON 88090305: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
HIGH 2ND HIGH VALUE IS	0.77924	ON 88101206: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
SYCAFTR HIGH 1ST HIGH VALUE IS	0.52645	ON 88120119: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
HIGH 2ND HIGH VALUE IS	0.50867	ON 88101206: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
KRCCAFTR HIGH 1ST HIGH VALUE IS	0.44594	ON 88021021: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
HIGH 2ND HIGH VALUE IS	0.42620	ON 88051006: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SBKA HIGH 1ST HIGH VALUE IS	1.09984	ON 88101206: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
HIGH 2ND HIGH VALUE IS	0.99673	ON 88031306: AT (	318000.00,	3929500.00,	345.10,	0.00)	DC
SAKA HIGH 1ST HIGH VALUE IS	0.82926	ON 88101206: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
HIGH 2ND HIGH VALUE IS	0.76523	ON 88091105: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC

*** THE SUMMARY OF HIGHEST 3-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR HIGH 1ST HIGH VALUE IS	0.26755b	ON 88090306: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
HIGH 2ND HIGH VALUE IS	0.25975m	ON 88101206: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
SYCAFTR HIGH 1ST HIGH VALUE IS	0.17548	ON 88120121: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
HIGH 2ND HIGH VALUE IS	0.16956m	ON 88101206: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
KRCCAFTR HIGH 1ST HIGH VALUE IS	0.16621m	ON 88091106: AT (	318000.00,	3930250.00,	360.70,	0.00)	DC

	HIGH	2ND HIGH VALUE IS	0.16337m	ON 88100406:	AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	0.38947m	ON 88091106:	AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.36661m	ON 88101206:	AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	0.31916m	ON 88091106:	AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.27642m	ON 88101206:	AT (	318000.00,	3930250.00,	360.70,	0.00)	DC

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.06927b	ON 88021024:	AT (	318750.00,	3928500.00,	328.90,	0.00) DC
	HIGH 2ND HIGH VALUE IS	0.04837b	ON 88080424:	AT (	318000.00,	3929500.00,	345.10,	0.00) DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.04377b	ON 88021024:	AT (	318000.00,	3930250.00,	360.70,	0.00) DC
	HIGH 2ND HIGH VALUE IS	0.03168b	ON 88080424:	AT (	318000.00,	3930250.00,	360.70,	0.00) DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.04210b	ON 88021024:	AT (	320500.00,	3929250.00,	364.70,	0.00) DC
	HIGH 2ND HIGH VALUE IS	0.02770m	ON 88091124:	AT (	318000.00,	3930250.00,	360.70,	0.00) DC
SBKA	HIGH 1ST HIGH VALUE IS	0.08347b	ON 88021024:	AT (	318750.00,	3928500.00,	328.90,	0.00) DC
	HIGH 2ND HIGH VALUE IS	0.06491m	ON 88091124:	AT (	318000.00,	3930250.00,	360.70,	0.00) DC
SAKA	HIGH 1ST HIGH VALUE IS	0.06148b	ON 88021024:	AT (	319500.00,	3930000.00,	344.10,	0.00) DC
	HIGH 2ND HIGH VALUE IS	0.05319m	ON 88091124:	AT (	318000.00,	3930250.00,	360.70,	0.00) DC

```
*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                                    ***
*** Model Executed on 07/20/04 at 13:08:25 ***
 Input File - C:\Sycamore\Sycamore7-20-04_89_SO2.DTA

Output File - C:\Sycamore\Sycamore7-20-04_89_SO2.LST

   Met File - C:\Sycamore\BFL89.asc

     Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
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*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.63000E-01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.63000E-01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.63000E-01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.63000E-01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.63000E-01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.63000E-01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.63000E-01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.63000E-01	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.63000E-01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.63000E-01	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
SYCBFR	1ST HIGHEST VALUE IS 0.00827 AT (320014.41, 3924017.50, 224.10, 0.00)		DC	NA
	2ND HIGHEST VALUE IS 0.00827 AT (320014.41, 3924042.50, 225.00, 0.00)		DC	NA
	3RD HIGHEST VALUE IS 0.00823 AT (319939.41, 3924117.50, 227.50, 0.00)		DC	NA
	4TH HIGHEST VALUE IS 0.00821 AT (319964.41, 3924117.50, 227.40, 0.00)		DC	NA
	5TH HIGHEST VALUE IS 0.00820 AT (319989.41, 3924042.50, 224.10, 0.00)		DC	NA
	6TH HIGHEST VALUE IS 0.00819 AT (319939.41, 3924092.50, 226.00, 0.00)		DC	NA
	7TH HIGHEST VALUE IS 0.00819 AT (319964.41, 3924092.50, 226.00, 0.00)		DC	NA
	8TH HIGHEST VALUE IS 0.00816 AT (319989.41, 3924067.50, 224.60, 0.00)		DC	NA
	9TH HIGHEST VALUE IS 0.00815 AT (319989.41, 3924092.50, 225.70, 0.00)		DC	NA
	10TH HIGHEST VALUE IS 0.00815 AT (319989.41, 3924017.50, 222.70, 0.00)		DC	NA
SYCAFTR	1ST HIGHEST VALUE IS 0.00456 AT (324750.00, 3920500.00, 255.00, 0.00)		DC	NA
	2ND HIGHEST VALUE IS 0.00453 AT (323750.00, 3920250.00, 263.70, 0.00)		DC	NA
	3RD HIGHEST VALUE IS 0.00452 AT (325000.00, 3920500.00, 264.90, 0.00)		DC	NA
	4TH HIGHEST VALUE IS 0.00438 AT (323500.00, 3920250.00, 259.10, 0.00)		DC	NA
	5TH HIGHEST VALUE IS 0.00436 AT (325250.00, 3920250.00, 258.30, 0.00)		DC	NA
	6TH HIGHEST VALUE IS 0.00432 AT (325000.00, 3920750.00, 262.60, 0.00)		DC	NA
	7TH HIGHEST VALUE IS 0.00430 AT (325500.00, 3919750.00, 260.30, 0.00)		DC	NA

	8TH HIGHEST VALUE IS	0.00430 AT (	320014.41,	3924017.50,	224.10,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.00429 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.00429 AT (	320014.41,	3924042.50,	225.00,	0.00)	DC	NA
KRCCAFTR	1ST HIGHEST VALUE IS	0.00456 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.00448 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.00414 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.00378 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.00367 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.00362 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.00359 AT (	322500.00,	3923250.00,	214.00,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.00357 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.00356 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.00353 AT (	322500.00,	3923000.00,	205.30,	0.00)	DC	NA

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE	NETWORK GRID-ID
SBKA	1ST HIGHEST VALUE IS	0.01131 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.01118 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.01098 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.01096 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.01086 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.01072 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.01061 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.01053 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.01023 AT (	325250.00,	3920000.00,	254.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.01020 AT (	325500.00,	3919750.00,	260.30,	0.00)	DC	NA
SAKA	1ST HIGHEST VALUE IS	0.00839 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.00829 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.00809 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.00800 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.00791 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.00782 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.00766 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.00765 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.00764 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.00740 AT (	325250.00,	3921000.00,	255.70,	0.00)	DC	NA

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.90384	ON 89101606: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.80353	ON 89110707: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.59341	ON 89101606: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.52802	ON 89110707: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.44060	ON 89121621: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.39150	ON 89121621: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
SBKA	HIGH 1ST HIGH VALUE IS	1.20807	ON 89101606: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.82593	ON 89112107: AT (	321250.00,	3929500.00,	344.90,	0.00)	DC
SAKA	HIGH 1ST HIGH VALUE IS	0.92718	ON 89101606: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.64670	ON 89091320: AT (	328000.00,	3928500.00,	421.60,	0.00)	DC

*** THE SUMMARY OF HIGHEST 3-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.30128m	ON 89101606: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.26784	ON 89110709: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.19780m	ON 89101606: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.17601	ON 89110709: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.18469m	ON 89092706: AT (	328000.00,	3928750.00,	441.80,	0.00)	DC

	HIGH	2ND HIGH VALUE IS	0.13470	ON 89122009:	AT (	317500.00,	3930250.00,	348.90,	0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	0.40269m	ON 89101606:	AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.27531c	ON 89112109:	AT (	321250.00,	3929500.00,	344.90,	0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	0.34308m	ON 89092706:	AT (	328000.00,	3928750.00,	441.80,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.22237	ON 89012521:	AT (	317500.00,	3930250.00,	348.90,	0.00)	DC

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)		RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH	1ST HIGH VALUE IS	0.06024m	ON 89020824:	AT (	316900.00,	3926400.00,	276.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.04767b	ON 89122524:	AT (	317250.00,	3930750.00,	348.10,	0.00)	DC
SYCAFTR	HIGH	1ST HIGH VALUE IS	0.03604b	ON 89122524:	AT (	317500.00,	3930250.00,	348.90,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.03213b	ON 89122524:	AT (	317250.00,	3930750.00,	348.10,	0.00)	DC
KRCCAFTR	HIGH	1ST HIGH VALUE IS	0.03548m	ON 89122024:	AT (	317500.00,	3930250.00,	348.90,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.02775b	ON 89122524:	AT (	318000.00,	3930250.00,	360.70,	0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	0.08022m	ON 89122024:	AT (	317250.00,	3930750.00,	348.10,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.06773b	ON 89122524:	AT (	317250.00,	3930750.00,	348.10,	0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	0.06444m	ON 89122024:	AT (	317250.00,	3930750.00,	348.10,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.05251m	ON 89122024:	AT (	317500.00,	3930250.00,	348.90,	0.00)	DC

```
*** ISCST3 - VERSION 02035 ***
*** Sycamore Cogen Plant                                                    ***
*** Model Executed on 07/20/04 at 13:12:23 ***
 Input File - C:\Sycamore\Sycamore7-20-04_90_SO2.DTA

Output File - C:\Sycamore\Sycamore7-20-04_90_SO2.LST

   Met File - C:\Sycamore\BFL90.asc

      Number of sources -         10
Number of source groups -          5
    Number of receptors -      13966
```

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RAT SCALAR VARY BY
KRCCA	0	0.63000E-01	319995.9	3924835.8	256.0	19.99	419.26	23.67	4.30	YES	
KRCCB	0	0.63000E-01	319992.9	3924792.5	256.0	19.99	419.26	23.67	4.30	YES	
KRCCSSC	0	0.63000E-01	319961.7	3924757.5	256.0	14.24	824.82	29.91	5.37	YES	
KRCCSSD	0	0.63000E-01	319958.9	3924715.8	256.0	14.24	824.82	29.91	5.37	YES	
SYCA	0	0.63000E-01	318287.0	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCB	0	0.63000E-01	318330.3	3925124.8	234.0	19.99	419.26	23.67	4.30	YES	
SYCC	0	0.63000E-01	318372.4	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCD	0	0.63000E-01	318415.3	3925125.0	234.0	19.99	419.26	23.67	4.30	YES	
SYCSSA	0	0.63000E-01	318292.0	3925154.8	234.0	14.24	824.82	29.91	5.37	YES	
SYCSSD	0	0.63000E-01	318422.1	3925155.5	234.0	14.24	824.82	29.91	5.37	YES	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
SYCBFR	SYCA , SYCB , SYCC , SYCD ,
SYCAFTR	SYCB , SYCC , SYCSSA , SYCSSD ,
KRCCAFTR	KRCCA , KRCCB , KRCCSSC , KRCCSSD ,
SBKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCA , SYCB , SYCC , SYCD ,
SAKA	KRCCA , KRCCB , KRCCSSC , KRCCSSD , SYCB , SYCC , SYCSSA , SYCSSD ,

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
SYCBFR	1ST HIGHEST VALUE IS	0.00839 AT (323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.00822 AT (323500.00, 3920250.00, 259.10, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.00799 AT (324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.00795 AT (325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.00795 AT (323750.00, 3920000.00, 259.50, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.00793 AT (324000.00, 3920000.00, 254.60, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.00780 AT (320014.41, 3924042.50, 225.00, 0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.00779 AT (320014.41, 3924017.50, 224.10, 0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.00775 AT (319939.41, 3924117.50, 227.50, 0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.00774 AT (319964.41, 3924117.50, 227.40, 0.00)	DC	NA
SYCAFTR	1ST HIGHEST VALUE IS	0.00490 AT (323750.00, 3920250.00, 263.70, 0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.00468 AT (323500.00, 3920250.00, 259.10, 0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.00468 AT (324750.00, 3920500.00, 255.00, 0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.00466 AT (325000.00, 3920500.00, 264.90, 0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.00460 AT (324000.00, 3920000.00, 254.60, 0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.00454 AT (323750.00, 3920000.00, 259.50, 0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.00448 AT (325250.00, 3920250.00, 258.30, 0.00)	DC	NA

	8TH HIGHEST VALUE IS	0.00445 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.00443 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.00443 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
KRCCAFTR	1ST HIGHEST VALUE IS	0.00485 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.00472 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.00414 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.00383 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.00378 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.00373 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.00373 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.00372 AT (	325250.00,	3922000.00,	272.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.00364 AT (	325250.00,	3921500.00,	268.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.00347 AT (	325250.00,	3921000.00,	255.70,	0.00)	DC	NA

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE	NETWORK GRID-ID
SBKA	1ST HIGHEST VALUE IS	0.01169 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.01169 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.01149 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.01144 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.01134 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.01108 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.01106 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.01092 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.01079 AT (	323750.00,	3920250.00,	263.70,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.01070 AT (	325250.00,	3920000.00,	254.20,	0.00)	DC	NA
SAKA	1ST HIGHEST VALUE IS	0.00873 AT (	325000.00,	3922000.00,	277.60,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.00858 AT (	325000.00,	3921000.00,	271.30,	0.00)	DC	NA
	3RD HIGHEST VALUE IS	0.00840 AT (	325000.00,	3920500.00,	264.90,	0.00)	DC	NA
	4TH HIGHEST VALUE IS	0.00818 AT (	325000.00,	3920750.00,	262.60,	0.00)	DC	NA
	5TH HIGHEST VALUE IS	0.00812 AT (	324750.00,	3920500.00,	255.00,	0.00)	DC	NA
	6TH HIGHEST VALUE IS	0.00810 AT (	325000.00,	3922250.00,	279.70,	0.00)	DC	NA
	7TH HIGHEST VALUE IS	0.00807 AT (	325250.00,	3920750.00,	267.90,	0.00)	DC	NA
	8TH HIGHEST VALUE IS	0.00792 AT (	325250.00,	3920250.00,	258.30,	0.00)	DC	NA
	9TH HIGHEST VALUE IS	0.00786 AT (	325250.00,	3920500.00,	255.20,	0.00)	DC	NA
	10TH HIGHEST VALUE IS	0.00770 AT (	325250.00,	3921750.00,	272.30,	0.00)	DC	NA

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.90295	ON 90021019: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.88646	ON 90122007: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.59311	ON 90021019: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.58790	ON 90122007: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.44979	ON 90033020: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.44594	ON 90010118: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SBKA	HIGH 1ST HIGH VALUE IS	1.20680	ON 90021019: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	1.01232	ON 90100905: AT (	319000.00,	3930500.00,	357.60,	0.00)	DC
SAKA	HIGH 1ST HIGH VALUE IS	0.92646	ON 90021019: AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.76428	ON 90100905: AT (	319000.00,	3930500.00,	357.60,	0.00)	DC

*** THE SUMMARY OF HIGHEST 3-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID		AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH 1ST HIGH VALUE IS	0.33138m	ON 90080406: AT (	317750.00,	3929500.00,	338.80,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.29549c	ON 90122009: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SYCAFTR	HIGH 1ST HIGH VALUE IS	0.21532m	ON 90080406: AT (	317750.00,	3929500.00,	338.80,	0.00)	DC
	HIGH 2ND HIGH VALUE IS	0.19597c	ON 90122009: AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
KRCCAFTR	HIGH 1ST HIGH VALUE IS	0.15427m	ON 90080406: AT (	319000.00,	3930500.00,	357.60,	0.00)	DC

	HIGH	2ND HIGH VALUE IS	0.14865	ON 90010118:	AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	0.40227	ON 90021021:	AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.33744m	ON 90100906:	AT (	319000.00,	3930500.00,	357.60,	0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	0.30882	ON 90021021:	AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.25476	ON 90010118:	AT (	319000.00,	3930500.00,	357.60,	0.00)	DC

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID			AVERAGE CONC	DATE (YYMMDDHH)		RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE
SYCBFR	HIGH	1ST HIGH VALUE IS	0.08142b	ON 90021024:	AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.04925b	ON 90122024:	AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
SYCAFTR	HIGH	1ST HIGH VALUE IS	0.05367b	ON 90021024:	AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.03266b	ON 90122024:	AT (	320500.00,	3929250.00,	364.70,	0.00)	DC
KRCCAFTR	HIGH	1ST HIGH VALUE IS	0.03583b	ON 90021024:	AT (	322250.00,	3929500.00,	363.90,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.02508b	ON 90112724:	AT (	318000.00,	3929500.00,	345.10,	0.00)	DC
SBKA	HIGH	1ST HIGH VALUE IS	0.10072b	ON 90021024:	AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.05903m	ON 90080424:	AT (	317500.00,	3930250.00,	348.90,	0.00)	DC
SAKA	HIGH	1ST HIGH VALUE IS	0.07541b	ON 90021024:	AT (	320750.00,	3929500.00,	361.70,	0.00)	DC
	HIGH	2ND HIGH VALUE IS	0.04631b	ON 90022724:	AT (	318250.00,	3930250.00,	348.50,	0.00)	DC

Attachment D

Draft Authorities to Construct
Equipment Description and Conditions

S-511-2-9: MODIFICATION OF 75 MW GENERAL ELECTRIC MODEL 7EA NATURAL GAS-FIRED COMBUSTION TURBINE COGENERATION UNIT WITH DRY LOW NOX COMBUSTORS: CLARIFY OPERATIONAL CONDITIONS (SYCAMORE UNIT#2)

S-511-3-9: MODIFICATION OF 75 MW GENERAL ELECTRIC MODEL 7EA NATURAL GAS-FIRED COMBUSTION TURBINE COGENERATION UNIT WITH DRY LOW NOX COMBUSTORS: CLARIFY OPERATIONAL CONDITIONS (SYCAMORE UNIT#3)

{1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule] Y

{1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Y

1. CGT Shall be fired on natural gas only. There shall be no provisions for oil firing. Natural gas used as fuel shall be pipeline quality with sulfur content of 0.3 gr/100 scf or less (0.001% sulfur by weight). [District NSR Rule; 40 CFR 60.333(a); Kern County Rule 407] Y

2. Operator shall not exceed a NOx emission rate of: (15 X EFF/25)ppmvd @ 15% O2, under load conditions, excluding thermal stabilization and reduced load periods, where EFF (efficiency) is the higher of EFF1 {100%x(3412 Btu/kW-hr)/(Actual Heat Rate at HHV, Btu/kW-hr)} or EFF2 {EFFmfr x (LHV/HHV)} where actual heat rate is a ratio of the heat input to power output taking into account the manufacturer's listed turbine efficiency, HHV is the higher heating value of the fuel, LHV is the lower heating value of the fuel, and EFFmfr is the manufacturer's continuous rated percent efficiency of the gas turbine with air pollution equipment at LHV. An EFF that is less than 25 shall be assigned a value of 25. [40 CFR 60.332(a)(1) & 60.332(a)(2) and District Rule 4703, 5.1.1] Y

3. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [Rule 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), Rule 110 (Madera), and Rule 108 (Kings); District Rule 1081] Y

4. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072-80, D 3031-81, D 4084-82 or D 3246-81. [40 CFR 60.335(d)] Y

5. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(b)(2)] Y

6. The HHV and LHV of the fuel shall be determined using ASTM D3588-91, ASTM 1826-88, OR ASTM 1945-81. [40 CFR 60.332(a),(b)] Y

7. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E or 20, and oxygen (O2) concentrations shall be determined using EPA Method 3, 3A, or 20. [40 CFR 60.335(b) and District Rule 4703, 6.4] Y

8. The operator shall provide source test information annually regarding the exhaust gas NOx concentration corrected to 15% O2 (dry). [40 CFR 60.332(a),(b) and District Rule 4703, 5.1] Y

9. The operator shall provide source test information annually regarding the demonstrated percent efficiency (EFF) as defined in District Rule 4703, 5.1.1. [40 CFR 60.332(a),(b) and 4703, 5.1.1] Y

~~10. Nitrogen oxides (NOx) and oxygen (O2) concentrations shall be determined using EPA Method 20. The span values shall be 300 ppm NOx and 21 percent O2. [40 CFR 60.335 (c)(2),(3)] Y~~

11. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a NOx performance test nor shall NOx emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)] Y

12. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.1.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera); District Rule 1080, 7.2] Y

13. Records shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEM's that have been installed pursuant to District Rule 1080, and emission measurements. [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera); District Rule 1080, 7.3 and 40 CFR 60.7(b)] Y

14. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.4.2] Y

15. The operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Y

16. Results of continuous emission monitoring must be averaged in accordance with the requirements of 40 CFR 60.13. [40 CFR 60.334(b),(c) and District Rule 4703, 5.0] Y

17. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(b); District Rules 2520, 9.4.2 and 4703, 6.2.4; PSD SJ 85-09, X.D.1] Y

18. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Kern, Kings, Merced, San Joaquin, Stanislaus, Tulare); Rule 108.1 (Kings) and Rule 108 (in all seven remaining counties in the San Joaquin Valley); Rule 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern and Stanislaus), and 110 (Madera); District Rule 4703, Section 6.2.2; District Rule 1080, 7.3; 40 CFR 60.333(a) and (b); 40 CFR 60.334 (b) and (c)(1). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Y

19. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: Rules 404 (Madera), 406 (Fresno), 407 (Kings, Merced, San Joaquin, Stanislaus, Tulare, Kern); District Rule 1081, 4201, 1080, Section 6.5, 7.2, 8.0, 9.0, and 10.0; 40 CFR 60.332(c) and (d); 60.334 (b), (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Y

20. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: District Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, and 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Y

21. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following subsumed requirements: Rule 404 (Merced); 40 CFR 60.332 (b); 60.335(a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Y

22. Operator shall install, operate, and maintain in calibration a system which continuously measures and records control system operating parameters, elapsed time of operation, and exhaust gas NOx concentration and O2 or CO2 concentration. [40 CFR 60.334(b),(c) and District Rules 2520, 9.4.2 and 4703] Y

23. The continuous NOx monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District,the ARB, and the EPA. [Rule 108 (Kings, Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera) and District Rule 1080, 6.7] Y

24. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)] Y

25. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera) and District Rule 1080, 9.0] Y

26. The APCO shall be notified no later than eight hours after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera) and District Rule 1080, 10.0; PSD SJ 85-09, X.D.3] Y

27. Operators of CEM's installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO and EPA. The report is due on the 30th day following the end of the calendar quarter and shall include: A. time intervals, data and magnitude of excess emissions (computed in accordance with 40 CFR 60.13(h)), nature and cause of excess (if known), corrective actions taken and preventive measures adopted; B. averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard. [Kern County Rule 108 and District Rule 1080, 8.0 and PSD SJ 85-09, X.D.3] Y

28. The written report for each calendar quarter shall also include: C. applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; D. a negative declaration when no excess emissions occurred. Excess emissions shall be defined as any 3-hour period during which the average emissions for CO, as measured by the CEM system, exceeds the emission limit set forth in PSD SJ 84-01, X.E. [Kern County Rule 108; District Rule 1080, 8.0; PSD SJ 85-09, X.D.3 and X.D.5.a through e] Y

29. The CGT combustors shall be a dry low NOx design capable of achieving 16.4 ppm or lower at 15% O2. [District Rule 4703 and PSD SJ 85-09, X.B] Y

30. Each CGT shall have a maximum heat input rate of 1020 MMBTU/hr on an LHV basis. Firing rate can be increased upon District witnessed emission sampling demonstration that compliance with emission sampling limits can be achieved at higher fuel rates. [District NSR Rule] Y

31. Permit unit shall include one unfired heat recovery steam generator (HRSG) for gas turbine engine assembly with rated steam output of 450,000 lb/hr at 80% quality steam production. [District NSR Rule] Y

32. Exhaust gas ducting from CGT's through HRSG's to the atmosphere shall be gas-tight. [District NSR Rule] Y

33. Bypass stack valve preceding each HRSG shall be designed to be gas-tight. [District NSR Rule] Y

34. Each CGT shall have a fuel consumption monitor/recorder. [District NSR Rule and PSD SJ 84-01, X.D.1] Y

35. Exhaust gas particulate matter concentration shall not exceed 0.0072 gr/scf calculated at 12% CO2. [District NSR Rule] Y

36. Each HRSG exhaust stack shall be equipped with permanent stack sampling provisions consistent with District Rule 1081, EPA reference Methods 5 and 8 and OSHA requirements. [District Rule 1081] Y

37. Operational records (including but not limited to: fuel characteristics, etc.) shall be maintained by Sycamore Cogeneration Company. [District NSR Rule] Y

~~38. This facility shall operate as a cogeneration facility pursuant to Public Resources Code Section 25134 for thermally enhanced oil recovery operations unless prior District approval is granted to operate otherwise. [District NSR Rule] Y~~

39. Accurate records of NOx (as NO2) and carbon monoxide (CO) flue gas concentrations corrected to 15% O2, dry and CGT fuel sulfur content shall be maintained and shall be reported as described by District Rule 1080 and upon request. [District Rule 1080] Y

~~Emission rates from CGT shall not exceed any of the following: PM10 - 5.0 lb/hr, SOx (as SO2) - 0.9 lb/hr, or VOC - 12.0 lb/hr. [District Rule 2201] Y~~

~~Emission rates from CGT shall not exceed any of the following: PM10 - 120.0 lb/day, SOx (as SO2) - 21.6 lb/day, NOx (as NO2) - 1,629.6 lb/day, VOC - 288.0 lb/day, or CO - 1056.0 lb/day. [District Rule 2201] Y~~

~~Emission rates from CGT, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO2) - 16.4 ppmvd @ 15% O_2, 67.9 lb/hr on a 3-hr avg, 79.7 lb/hr on a 1-hr avg, or CO - 25 ppmvd @ 15% O_2, 44.0 lb/hr on a 3-hr avg. [District Rules 2201 and 4703] Y~~

During startup and shutdown, emissions shall not exceed any of the follwing: 140.0 lb/hr of NOx on a 2-hr avg, or 140 lb/hr of CO on a 2-hr avg. [District Rule 2201] Y

Each 1-hour period in a 1, 2 or 3-hour average will commence on the hour. The 3-hour average will be compiled from the three most recent 1-hour periods. The 2-hour average will be compiled from the two most recent 1-hour periods. [District Rule 1080] Y

40. The limit for NOx, except during the conditions of startup and shutdown, shall be 16.4 ppmv at 15%02 as NO2 (3hr avg), 67.9 lb/hr (3hr avg) (1629.6 lb/day) as NO2 and 79.7 lb/hr as NO2 (max 1hr avg). [District Rules 4703 and NSR] Y

41. The limit for CO, except during the conditions of startup and shutdown, shall be 25 ppmv at 15% O2 (3 hr avg) or 44.0 lb/hr(3hr avg.)(1056 lb/dy). [District Rule 4703 and PSD SJ 85-09, X.E] Y

42. Daily emissions for the unit may be determined from the arithmetic mean of three, 40-minute test runs for NOx and CO, multiplied by the appropriate factor. [District Rule 2520, 9.4.2 and District Rule 4703] Y

43. Source testing to determine NOx and CO emissions and fuel gas sulfur content shall be conducted annually. [District Rule 1081] Y

44. Annual compliance tests shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1081] Y

45. Continuous emission monitoring system for NOx as NO2 and continuous monitoring system for CO & CO2 shall serve each CGT flue gas stream, shall conform to SJVUAPCD Rule 1080 specifications, shall meet EPA monitoring performance specifications, & shall be operational whenever the turbine is in operation. [District Rule 1080 and PSD SJ 85-09, X.D.1 and .2] Y

46. All continuous emissions monitoring systems shall be calibrated and operated according to EPA guidelines as specified in 40 CFR 60, Appendix B and 40 CFR 52, Appendix E. CEM ppm and lb/hr shall be calculated as a three-hour and a 1-hour average. [District Rule 1080 and PSD SJ 85-09 X.D.2] Y

47. Each 1-hour period in a 3-hour average will commence on the hour. The 3-hour average will be compiled from the three most recent 1-hour periods. [District Rule 1080] Y

48. Quarterly continuous emission monitoring system reports shall be submitted to the District, EPA and CEC, as required by EPA regulations as specified in CFR Title 40, Part 58, Appendix B and Part 60 Appendix B. [District Rule 1080 and PSD SJ 85-09, X.D.5] Y

49. Audits of continuous emission monitoring system shall be conducted in accordance with EPA guidelines, witnessed at the District's discretion, and reports shall be submitted to the District within 60 days of such an audit. [District Rule 1080 and PSD SJ 85-09, X.D.3] Y

50. The Relative Accuracy Audit shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1080 and PSD SJ 85-09, X.D.3] Y

~~51. During hours of CGT startup or shutdown, emissions shall not exceed 140.0 lb/hr of NOx averaged over a two (2) hour period and shall not exceed 1629.6 lb NOx/day. [District NSR Rule] Y~~

52. Startup and shutdown of CGT, as defined in 40 CFR, Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [40 CFR 60.8] Y

53. NO2 and CO daily emissions during days of startup/shutdown shall be calculated from natural gas combustion rates and CEM results. [District Rule 1080] Y

54. Daily records of NO2 and CO emission calculations during days of gas turbine startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1080] Y

55. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 85-09] Y

56. The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in CO emissions above any allowable emissions limit stated in this permit. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. [PSD SJ 85-09] Y

57. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the conditions of this permit, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 85-09] Y

58. The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations. [PSD SJ 84-01] Y

59. Any requirements established by this permit for the gathering and reporting of information are not subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act (PRA) because this permit is not an "information collection request" within the meaning of 44 U.S.C. Subsections 3502(4) & (11), 3507, 3512, and 3518. Furthermore, this permit and any information gathering and reporting requirements established by this permit are exempt from OMB review under the PRA because it is directed to fewer than ten persons. [44 U.S.C. Section 3502(4), (11) and 5 CFR Section 1320.5(a) and PSD SJ 85-09] Y

60. At such times as specified by the USEPA, permittee shall conduct or cause to be conducted performance tests (as described in 40 CFR 60.8) for CO on the exhaust stack gasses and furnish the District, the California ARB and the USEPA a written report of the results of such tests. All performance tests shall be conducted on an annual basis and at the maximum operating capacity of the emissions unit being tested. Upon written request from permittee, and adequate justification, USEPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity. [PSD SJ 85-09] Y

61. Performance tests for the emissions of CO shall be conducted and results reported in accordance with the test methods set forth in 40 CFR 60.8 and 40 CFR 60, Appendix A. The performance tests for the emissions of CO shall be conducted using EPA Methods 1 through 4 and 10 [PSD SJ 85-09] Y

62. The USEPA shall be notified in writing at least 30 days in advance of such test to allow time for development of an approvable performance test plan and to arrange for an observer to be present at the test. Such prior approval shall minimize the possibility of USEPA rejection of test results for procedural deficiencies. In lieu of the above mentioned test methods, equivalent methods may be used with prior written approval from the USEPA. [PSD SJ 85-09] Y

63. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit. [PSD SJ 85-09] Y

64. For performance test purposes, sampling ports, platforms, and access shall be provided by the facility on the emission unit exhaust system in accordance with 40 CFR 60.8(e). [PSD SJ 85-09] Y

65. The cogeneration facility is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60). The owner or operator shall meet all applicable requirements of Subparts A and GG of this regulation. [PSD SJ 85-09] Y

66. All correspondence as required by the PSD permit shall be forwarded to: a) Director, Enforcement Div (Attn: A-5), EPA Region IX, 75 Hawthorne Street, San Francisco, CA, 94105; b) Chief, Stationary Source Control Division, California Air Resource Board, P.O. Box 2815, Sacramento, CA, 95814; and c) Compliance Division, SJVUAPCD. [PSD SJ 85-09] Y

~~67. Maximum emission rates, except during conditions of startup and shutdown, shall not exceed: PM10, 5.0 lb/hr, SOX as SO2, 0.5 lb/hr as SO2, 0.6 lb/hr as SO4, VOC's, 12.0 lb/hr. [District NSR Rule] Y~~

68. The operator shall perform source testing for PM10 concentration and emission rate once per permit term using EPA Method 5. [40 CFR 60.8 (b) and (c)] Y

S-511-1-9: MODIFICATION OF 75 MW GENERAL ELECTRIC MODEL 7EA NATURAL GAS-FIRED COMBUSTION TURBINE UNIT WITH DRY LOW NOX COMBUSTORS: ALLOW DISCHARGING OF EXHAUST THROUGH BYPASS STACK WHEN OPERATING IN SIMPLE CYCLE MODE IN ADDITION TO EXISTING UNFIRED 450,000 LB/HR HEAT RECOVERY STEAM GENERATOR WHEN OPERATING IN COGENERATION MODE (SYCAMORE UNIT #1)

S-511-4-9: MODIFICATION OF 75 MW GENERAL ELECTRIC MODEL 7EA NATURAL GAS-FIRED COMBUSTION TURBINE UNIT WITH DRY LOW NOX COMBUSTORS: ALLOW DISCHARGING OF EXHAUST THROUGH BYPASS STACK WHEN OPERATING IN SIMPLE CYCLE MODE IN ADDITION TO EXISTING UNFIRED 450,000 LB/HR HEAT RECOVERY STEAM GENERATOR WHEN OPERATING IN COGENERATION MODE (SYCAMORE UNIT #4)

Both units have the same permit conditions; therefore, only one set is included below

(changes from current permits are highlighted in the electronic copy and noted in underline/strikeout form)

{1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District NSR Rule] Y

{1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Y

1. CGT Shall be fired on natural gas only. There shall be no provisions for oil firing. Natural gas used as fuel shall be pipeline quality with sulfur content of 0.3 gr/100 scf or less (0.001% sulfur by weight). [District NSR Rule; 40 CFR 60.333(a); Kern County Rule 407] Y

2. Operator shall not exceed a NOx emission rate of: (15 X EFF/25)ppmvd @ 15% O2, under load conditions, excluding thermal stabilization and reduced load periods, where EFF (efficiency) is the higher of EFF1 {100%x(3412 Btu/kW-hr)/(Actual Heat Rate at HHV, Btu/kW-hr)} or EFF2 {EFFmfr x (LHV/HHV)} where actual heat rate is a ratio of the heat input to power output taking into account the manufacturer's listed turbine efficiency, HHV is the higher heating value of the fuel, LHV is the lower heating value of the fuel, and EFFmfr is the manufacturer's continuous rated percent efficiency of the gas turbine with air pollution equipment at LHV. An EFF that is less than 25 shall be assigned a value of 25. [40 CFR 60.332(a)(1) & 60.332(a)(2) and District Rule 4703, 5.1.1] Y

3. Operator shall be required to conform to the compliance testing procedures described in District Rule 1081. [Rule 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus), Rule 110 (Madera), and Rule 108 (Kings); District Rule 1081] Y

4. If the turbine is not fired on PUC-regulated natural gas, then the sulfur content of the natural gas being fired in the turbine shall be determined using ASTM method D 1072-80, D 3031-81, D 4084-82 or D 3246-81. [40 CFR 60.335(d)] Y

5. If the turbine is not fired on PUC-regulated natural gas, the sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(b)(2)] Y

6. The HHV and LHV of the fuel shall be determined using ASTM D3588-91, ASTM 1826-88, OR ASTM 1945-81. [40 CFR 60.332(a),(b)] Y

7. Nitrogen oxides (NOx) concentrations shall be determined using EPA Method 7E or 20, and oxygen (O2) concentrations shall be determined using EPA Method 3, 3A, or 20. [40 CFR 60.335(b) and District Rule 4703, 6.4] Y

8. The operator shall provide source test information annually regarding the exhaust gas NOx concentration corrected to 15% O2 (dry). [40 CFR 60.332(a),(b) and District Rule 4703, 5.1] Y

9. The operator shall provide source test information annually regarding the demonstrated percent efficiency (EFF) as defined in District Rule 4703, 5.1.1. [40 CFR 60.332(a),(b) and 4703, 5.1.1] Y

~~10. Nitrogen oxides (NOx) and oxygen (O2) concentrations shall be determined using EPA Method 20. The span values shall be 300 ppm NOx and 21 percent O2. [40 CFR 60.335 (c)(2),(3)] Y~~

11. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a NOx performance test nor shall NOx emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)] Y

12. Results of continuous emissions monitoring must be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.1.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera); District Rule 1080, 7.2] Y

13. Records shall be maintained and shall contain: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance of any CEM's that have been installed pursuant to District Rule 1080, and emission measurements. [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera); District Rule 1080, 7.3 and 40 CFR 60.7(b)] Y

14. If the turbine is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520, 9.4.2] Y

15. The operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Y

16. Results of continuous emission monitoring must be averaged in accordance with the requirements of 40 CFR 60.13. [40 CFR 60.334(b),(c) and District Rule 4703, 5.0] Y

17. Operator shall maintain a stationary gas turbine operating log that includes, on a daily basis the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [40 CFR 60.332(b); District Rules 2520, 9.4.2 and 4703, 6.2.4; PSD SJ 85-09, X.D.1] Y

18. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Kern, Kings, Merced, San Joaquin, Stanislaus, Tulare); Rule 108.1 (Kings) and Rule 108 (in all seven remaining counties in the San Joaquin Valley); Rule 108 (Kings), 108.1 (Fresno, Merced, San Joaquin, Tulare, Kern and Stanislaus), and 110 (Madera); District Rule 4703, Section 6.2.2; District Rule 1080, 7.3; 40 CFR 60.333(a) and (b); 40 CFR 60.334 (b) and (c)(1). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Y

19. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: Rules 404 (Madera), 406 (Fresno), 407 (Kings, Merced, San Joaquin, Stanislaus, Tulare, Kern); District Rule 1081, 4201, 1080, Section 6.5, 7.2, 8.0, 9.0, and 10.0; 40 CFR 60.332(c) and (d); 60.334 (b), (c)(2); 60.335(d). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Y

20. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: District Rule 4703, sections 5.0, 5.1.1, 6.2.1, 6.2.4, 6.3, 6.4.1, 6.4.3, 6.4.5, and 6.4.6. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Y

21. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following subsumed requirements: Rule 404 (Merced); 40 CFR 60.332 (b); 60.335(a), (b), (c), and (e). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Y

22. Operator shall install, operate, and maintain in calibration a system which continuously measures and records control system operating parameters, elapsed time of operation, and exhaust gas NOx concentration and O2 or CO2 concentration. [40 CFR 60.334(b),(c) and District Rules 2520, 9.4.2 and 4703] Y

23. The continuous NOx monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District,the ARB, and the EPA. [Rule 108 (Kings, Fresno, Merced, San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera) and District Rule 1080, 6.7] Y

24. Operator shall submit a semiannual report listing any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8% by weight. [40 CFR 60.334(c)(2)] Y

25. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera) and District Rule 1080, 9.0] Y

26. The APCO shall be notified no later than eight hours after the detection of a breakdown of the CEM. The operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [Rule 108 (Kings, Fresno, Merced San Joaquin, Tulare, Kern, and Stanislaus) and Rule 109 (Madera) and District Rule 1080, 10.0; PSD SJ 85-09, X.D.3] Y

27. Operators of CEM's installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO and EPA. The report is due on the 30th day following the end of the calendar quarter and shall include: A. time intervals, data and magnitude of excess emissions (computed in accordance with 40 CFR 60.13(h)), nature and cause of excess (if known), corrective actions taken and preventive measures adopted; B. averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard. [Kern County Rule 108 and District Rule 1080, 8.0 and PSD SJ 85-09, X.D.3] Y

28. The written report for each calendar quarter shall also include: C. applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; D. a negative declaration when no excess emissions occurred. Excess emissions shall be defined as any 3-hour period during which the average emissions for CO, as measured by the CEM system, exceeds the emission limit set forth in PSD SJ 85-09, X.E. [Kern County Rule 108; District Rule 1080, 8.0; PSD SJ 84- 01, X.D.3 and X.D.5.a through e] Y

29. The CGT combustors shall be a dry low NOx design capable of achieving 16.4 ppm or lower at 15% O2. [District Rule 4703 and PSD SJ 85-09, X.B] Y

30. Each CGT shall have a maximum heat input rate of 1020 MMBTU/hr on an LHV basis. Firing rate can be increased upon District witnessed emission sampling demonstration that compliance with emission sampling limits can be achieved at higher fuel rates. [District NSR Rule] Y

31. Permit unit shall include one unfired heat recovery steam generator (HRSG) for gas turbine engine assembly with rated steam output of 450,000 lb/hr at 80% quality steam production. [District NSR Rule] Y

CGT may exhaust either through unfired 450,000 lb/hr heat recovery steam generator or through bypass stack. [District Rule 2201] Y

32. When operating in cogeneration mode, eExhaust gas ducting from CGT's through HRSG's to the atmosphere shall be gas-tight. [District NSR Rule] Y

33. Bypass stack valve preceding each HRSG shall be designed to be gas-tight to the atmosphere when exhaust is discharged through HRSG and shall be designed to be gas-tight to the HRSG when exhaust is discharged through the bypass stack. [District NSR Rule] Y

34. Each CGT shall have a fuel consumption monitor/recorder. [District NSR Rule and PSD SJ 85-09, X.D.1] Y

35. Exhaust gas particulate matter concentration shall not exceed 0.0072 gr/scf calculated at 12% CO2. [District NSR Rule] Y

36. Each HRSG exhaust stack shall be equipped with permanent stack sampling provisions consistent with District Rule 1081, EPA reference Methods 5 and 8 and OSHA requirements. [District Rule 1081] Y

37. Operational records (including but not limited to: fuel characteristics, etc.) shall be maintained by Sycamore Cogeneration Company. [District NSR Rule] Y

~~38. This facility shall operate as a cogeneration facility pursuant to Public Resources Code Section 25134 for thermally enhanced oil recovery operations unless prior District approval is granted to operate otherwise. [District NSR Rule] Y~~

39. Accurate records of NOx (as NO2) and carbon monoxide (CO) flue gas concentrations corrected to 15% O2, dry and CGT fuel sulfur content shall be maintained and shall be reported as described by District Rule 1080 and upon request. [District Rule 1080] Y

~~Emission rates from CGT shall not exceed any of the following: PM10 - 5.0 lb/hr, SOx (as SO2) - 0.9 lb/hr, or VOC - 12.0 lb/hr. [District Rule 2201] Y~~

~~Emission rates from CGT shall not exceed any of the following: PM10 - 120.0 lb/day, SOx (as SO2) - 21.6 lb/day, NOx (as NO2) - 1,629.6 lb/day, VOC - 288.0 lb/day, or CO - 1056.0 lb/day. [District Rule 2201] Y~~

~~Emission rates from CGT, except during startup and/or shutdown, shall not exceed any of the following: NOx (as NO2) - 16.4 ppmvd @ 15% O_2, 67.9 lb/hr on a 3-hr avg, 79.7 lb/hr on a 1-hr avg, or CO - 25 ppmvd @ 15% O_2, 44.0 lb/hr on a 3-hr avg. [District Rules 2201 and 4703] Y~~

~~During startup and shutdown, emissions shall not exceed any of the following: 140.0 lb/hr of NOx on a 2-hr avg, 140 lb/hr of CO on a 2-hr avg, or 200 lb/hr of CO on a 1-hr avg. [District Rule 2201] Y~~

~~Each 1-hour period in a 1-, 2- or 3-hour average will commence on the hour. The 3-hour average will be compiled from the three most recent 1-hour periods. The 2-hour average will be compiled from the two most recent 1-hour periods. [District Rule 1080] Y~~

~~40. The limit for NOx, except during the conditions of startup and shutdown, shall be 16.4 ppmv at 15%02 as NO2 (3hr avg), 67.9 lb/hr (3hr avg) (1629.6 lb/day) as NO2 and 79.7 lb/hr as NO2 (max 1hr avg). [District Rules 4703 and NSR] Y~~

~~41. The limit for CO, except during the conditions of startup and shutdown, shall be 25 ppmv at 15% O2 (3-hr avg) or 44.0 lb/hr(3hr avg.)(1056 lb/dy). [District Rule 4703 and PSD SJ 85-09, X.E] Y~~

42. Daily Emissions for the unit may be determined from the arithmetic mean of three, 40-minute test runs for NOx and CO, multiplied by the appropriate factor. [District Rule 2520, 9.4.2 and District Rule 4703] Y

43. Source testing to determine NOx and CO emissions and fuel gas sulfur content shall be conducted annually. [District Rule 1081] Y

44. Annual compliance tests shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1081] Y

45. Continuous emission monitoring system for NOx as NO2 and continuous monitoring system for CO & CO2 shall serve each CGT flue gas stream, shall conform to SJVUAPCD Rule 1080 specifications, shall meet EPA monitoring performance specifications, & shall be operational whenever the turbine is in operation. [District Rule 1080 and PSD SJ 85-09, X.D.1 and .2] Y

46. All continuous emissions monitoring systems shall be calibrated and operated according to EPA guidelines as specified in 40 CFR 60, Appendix B and 40 CFR 52, Appendix E. CEM ppm and lb/hr shall be calculated as a three-hour and a 1-hour average. [District Rule 1080 and PSD SJ 85-09 X.D.2] Y

~~47. Each 1-hour period in a 3-hour average will commence on the hour. The 3-hour average will be compiled from the three most recent 1-hour periods. [District Rule 1080] Y~~

48. Quarterly continuous emission monitoring system reports shall be submitted to the District, EPA and CEC, as required by EPA regulations as specified in CFR Title 40, Part 58, Appendix B and Part 60 Appendix B. [District Rule 1080 and PSD SJ 85-09, X.D.5] Y

49. Audits of continuous emission monitoring system shall be conducted in accordance with EPA guidelines, witnessed at the District's discretion, and reports shall be submitted to the District within 60 days of such an audit. [District Rule 1080 and PSD SJ 85-09, X.D.3] Y

50. The Relative Accuracy Audit shall be conducted by an independent laboratory in accordance with EPA guidelines, witnessed or authorized by the District. Results shall be submitted to the District within 60 days. [District Rule 1080 and PSD SJ 85-09, X.D.3] Y

~~51. During hours of CGT startup or shutdown, emissions shall not exceed 140.0 lb/hr of NOx averaged over a two (2) hour period and shall not exceed 1629.6 lb NOx/day. [District NSR Rule] Y~~

52. Startup and shutdown of CGT, as defined in 40 CFR, Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [40 CFR 60.8] Y

53. NO2 and CO daily emissions during days of startup/shutdown shall be calculated from natural gas combustion rates and CEM results. [District Rule 1080] Y

54. Daily records of NO2 and CO emission calculations during days of gas turbine startup/shutdown shall be maintained and such records shall be made readily available for District inspection upon request for a period of five years. [District Rule 1080] Y

55. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [PSD SJ 85-09] Y

56. The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in CO emissions above any allowable emissions limit stated in this permit. In addition, the Regional Administrator shall be notified in writing within 15 days of any such failure. [PSD SJ 85-09] Y

57. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under the conditions of this permit, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [PSD SJ 85-09] Y

58. The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations. [PSD SJ 85-09] Y

59. Any requirements established by this permit for the gathering and reporting of information are not subject to review by the Office of Management and Budget (OMB) under the Paperwork Reduction Act (PRA) because this permit is not an "information collection request" within the meaning of 44 U.S.C. Subsections 3502(4) & (11), 3507, 3512, and 3518. Furthermore, this permit and any information gathering and reporting requirements established by this permit are exempt from OMB review under the PRA because it is directed to fewer than ten persons. [44 U.S.C. Section 3502(4), (11) and 5 CFR Section 1320.5(a) and PSD SJ 84-01] Y

60. At such times as specified by the USEPA, permittee shall conduct or cause to be conducted performance tests (as described in 40 CFR 60.8) for CO on the exhaust stack gasses and furnish the District, the California ARB and the USEPA a written report of the results of such tests. All performance tests shall be conducted on an annual basis and at the maximum operating capacity of the emissions unit being tested. Upon written request from permittee, and adequate justification, USEPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity. [PSD SJ 85-09] Y

61. Performance tests for the emissions of CO shall be conducted and results reported in accordance with the test methods set forth in 40 CFR 60.8 and 40 CFR 60, Appendix A. The performance tests for the emissions of CO shall be conducted using EPA Methods 1 through 4 and 10 [PSD SJ 84- 01] Y

62. The USEPA shall be notified in writing at least 30 days in advance of such test to allow time for development of an approvable performance test plan and to arrange for an observer to be present at the test. Such prior approval shall minimize the possibility of USEPA rejection of test results for procedural deficiencies. In lieu of the above mentioned test methods, equivalent methods may be used with prior written approval from the USEPA. [PSD SJ 85-09] Y

63. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit. [PSD SJ 85-09] Y

64. For performance test purposes, sampling ports, platforms, and access shall be provided by the facility on the emission unit exhaust system in accordance with 40 CFR 60.8(e). [PSD SJ 85-09] Y

65. The cogeneration facility is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60). The owner or operator shall meet all applicable requirements of Subparts A and GG of this regulation. [PSD SJ 85-09] Y

66. All correspondence as required by the PSD permit shall be forwarded to: a) Director, Enforcement Div (Attn: A-5), EPA Region IX, 75 Hawthorne Street, San Francisco, CA, 94105; b) Chief, Stationary Source Control Division, California Air Resource Board, P.O. Box 2815, Sacramento, CA, 95814; and c) Compliance Division, SJVUAPCD. [PSD SJ 85-09] Y

~~67. Maximum emission rates, except during conditions of startup and shutdown, shall not exceed: PM10, 5.0 lb/hr; SOX as SO2, 0.5 lb/hr as SO2; 0.6 lb/hr as SO4; VOC's, 12.0 lb/hr. [District NSR Rule] Y~~

68. The operator shall perform source testing for PM10 concentration and emission rate once per permit term using EPA Method 5. [40 CFR 60.8 (b) and (c)] Y

Attachment E

Emission Profiles

REPLACE WITH SJVAPCD SYCAMORE PROFILE PRINTOUTS

Unit 1 - CEMS Data

Month/Year	Day	Daily Fuel Gas In tons/day	fuel gas heat rate (mmbtu/hr) – lower heating value	Average CO2 conc. (%)	Average O2 conc. (%)	Average CO conc. uncorrected (ppm)	Average CO conc. corrected (ppm)	Average CO emission factor (lb/mmbtu)	Average CO mass emission rate (lb/hr)	CO mass emissions rate (lb/day)	Average NOx conc. uncorrected (ppm)	Average NOx conc. corrected (ppm)	Average NOx emission factor (lb/mmbtu)	Average NOx mass emission rate (lb/hr)	Daily NOx mass emissions rate (lb/day)	Daily turbine run time (hr/day)	Fuel Gas (MMBtu/day)
May02	01	480.28	820.6848755	3.065775	15.47394	4.02283335	4.372478485	0.01079031	8.857404709	203.7203	8.384263039	9.117139816	0.03695973	30.3139095	697.2199097	24	19696.43701
	02	476.7253	814.6102295	3.080738	15.44745	4.33662081	4.691779613	0.011578279	9.434679985	226.4323	8.410282135	9.100643158	0.036892854	30.0531578	721.2758179	24	19550.64551
	03	473.8624	809.71875	3.099308	15.4146	4.35554028	4.683628559	0.011558158	9.361982346	224.6876	8.450982094	9.08968544	0.036848426	29.8380127	716.1123047	24	19433.25
	04	473.8491	809.6951904	3.073176	15.46083	4.10249519	4.447845936	0.010976311	8.888936996	195.5566	8.146019936	8.83407402	0.03581221	28.9863186	637.6989746	24	19432.68457
	05	469.8072	802.789856	3.090658	15.4299	4.17477512	4.503012657	0.011112436	8.927339554	214.2561	7.853996277	8.470046043	0.034336478	27.5570621	661.3695068	24	19266.95654
	06	471.0418	804.897583	3.096191	15.42011	3.9693675	4.271869183	0.010542032	8.488558769	203.7254	8.057972908	8.674717903	0.035166193	28.3078251	679.3878174	24	19317.54199
	07	475.4226	812.3850708	3.092821	15.42607	3.93582129	4.241571903	0.010467273	8.506101608	204.1464	8.35559082	9.005972862	0.036509056	29.658617	711.8068237	24	19497.2417
	08	476.6566	814.4928589	3.07777	15.4527	4.20662498	4.554481983	0.011239458	9.158088684	219.7941	7.994218826	8.654965401	0.035086133	28.584795	686.0350952	24	19547.82861
	09	477.8244	816.4879761	3.08398	15.44171	4.51674938	4.881493568	0.01204645	9.837451935	236.0988	7.841119289	8.475133896	0.034357101	28.0535049	673.2841187	24	19595.71143
	10	482.3651	824.2479248	3.079339	15.44993	4.62835693	5.010253906	0.012364204	10.19408798	244.6581	8.058927536	8.724060059	0.035366222	29.1526585	699.6638184	24	19781.9502
	11	479.9619	820.1403198	3.110436	15.39491	4.69051933	5.026615143	0.012404579	10.17408466	244.178	8.199309349	8.787816048	0.03562469	29.2246876	701.3925171	24	19683.36768
	12	132.0055	601.5094604	2.315322	12.16192	4.89036417	11.32842064	0.027956078	9.218374252	82.96537	8.88490963	10.61226368	0.043020755	30.2897854	272.6080627	8.472222	5096.121881
	13	480.3629	820.8256836	3.114378	15.38793	3.99480414	4.275135517	0.010550085	8.663199425	207.9168	8.634926796	9.242895126	0.037469525	30.7528706	738.0689087	24	19699.81641
	14	480.4729	821.0134888	3.115651	15.38568	3.65886998	3.914443731	0.009659979	7.933107853	190.3946	9.023326874	9.654547691	0.039138295	32.1378746	771.309021	24	19704.32373
	15	476.9613	815.013855	3.118259	15.38107	3.63772535	3.88799262	0.009594705	7.82242918	187.7383	8.753052711	9.356852531	0.037931487	30.9206715	742.0961304	24	19560.33252
	16	478.0053	816.7977295	3.123189	15.37234	3.49534297	3.729755878	0.00920421	7.519205093	127.8265	8.816571236	9.411235809	0.038151946	31.1512814	529.5717773	24	19603.14551
	17	473.0853	808.3900146	3.096446	15.41966	3.28382635	3.535200119	0.00872409	7.052988529	169.2717	8.758934975	9.427619934	0.038218372	30.9009876	741.6237183	24	19401.36035
	18	473.308	808.7703857	3.099944	15.41347	3.29543161	3.543280363	0.008744027	7.073169708	169.7561	8.974040031	9.649662018	0.039118499	31.638588	759.3261108	24	19410.48926
	19	479.6922	819.6801147	3.118512	15.38061	3.22150421	3.443429947	0.008497625	6.96612215	167.1869	9.25274086	9.890094757	0.040093217	32.8627586	788.7061768	24	19672.32275
	20	484.6291	828.1159668	3.126272	15.36689	3.43184161	3.659615517	0.009031121	7.482631207	179.5831	9.340023041	9.958817482	0.040371805	33.4265289	802.2366943	24	19874.7832
	21	489.0855	835.7302246	3.123284	15.37218	3.85712409	4.116601467	0.010158862	8.490812302	203.7795	8.925549507	9.525583267	0.03861551	32.2745132	774.5883179	24	20057.52539
	22	486.0221	830.4961548	3.056749	15.48992	3.74169469	4.079935074	0.01006838	8.359210014	192.2618	8.438456535	9.194948196	0.037275162	30.9509048	711.8707886	24	19931.90771
	23	483.8907	826.8532715	3.04518	15.51039	3.59764051	3.939117432	0.009720878	8.035881042	184.8253	7.811531067	8.549184799	0.034657318	28.637743	658.6680908	24	19844.47852
	24	478.2517	817.2202148	3.113988	15.38863	3.52046204	3.768112898	0.009298866	7.568676472	105.9615	8.122655869	8.701225281	0.035273679	28.6377563	400.9285889	24	19613.28516
	25	473.5989	809.2680664	3.110054	15.39559	3.64408422	3.905365944	0.009637574	7.802228928	187.2535	8.771972656	9.401187897	0.038111247	30.8582916	740.598999	24	19422.43359
	26	473.789	809.5919189	3.117242	15.38287	3.62437153	3.875366211	0.009563546	7.745315075	185.8876	8.410282135	8.993177414	0.036457192	29.5200577	708.4813843	24	19430.20605
	27	473.4286	808.9769287	3.118194	15.38118	3.58430505	3.830580711	0.009453025	7.6513381	183.6321	8.560681343	9.151193619	0.037097774	30.0141659	720.3400269	24	19415.44629
	28	472.7117	807.75177	3.117433	15.38253	3.92214918	4.192957878	0.010347303	8.359671593	200.6321	8.43253994	9.017087936	0.036554117	29.5332298	708.7974854	24	19386.04248
	29	467.1594	798.2643433	3.083625	15.44234	4.12253809	4.456568241	0.010997835	8.776911736	201.869	8.033060074	8.682427406	0.035197459	28.0909252	646.0913086	24	19158.34424
	30	461.7609	789.0397949	3.093966	15.42405	4.19480658	4.519196033	0.011152371	8.801534653	211.2368	7.86591959	8.476651192	0.034363266	27.1196918	650.8726196	24	18936.95508
	31	461.8242	789.1478271	3.10961	15.39636	3.68955374	3.954620838	0.00975913	7.703317165	184.8796	8.036510468	8.615908623	0.034927774	27.5668373	661.604126	24	18939.54785
Jun02	01	469.9807	803.0856323	3.105859	15.403	3.60656381	3.870731354	0.009552103	7.673326492	184.1598	8.274350166	8.880551338	0.036000617	28.9130173	693.9124146	24	19274.05518
	02	478.5139	817.6663818	3.10414	15.40605	3.72961783	4.004786491	0.009882932	8.083106995	193.9946	8.475306511	9.100782394	0.036893401	30.1702785	724.086731	24	19623.99316
	03	473.4753	809.0567627	3.119976	15.37803	3.87365842	4.137968063	0.010211591	8.267310143	198.4155	8.54287529	9.127804756	0.037002955	29.9405079	718.5722046	24	19417.3623
	04	466.2554	796.7199707	3.096301	15.41991	3.8447082	4.140142441	0.010216969	8.132343292	178.9115	8.189322472	8.81445694	0.035732709	28.4509315	625.9205322	24	19121.2793
	05	465.8351	796.0016479	3.14166	15.33964	3.46777081	3.697682858	0.009125059	7.241814613	173.8036	9.1117239	9.634752274	0.039058056	31.1615372	747.8768921	24	19104.03955
	06	463.8737	792.6498413	3.152345	15.32075	3.4143517	3.628456593	0.00895423	7.072535038	169.7408	9.304574013	9.804998398	0.03974824	31.5884037	758.1217041	24	19023.59619
	07	464.4668	793.6640015	3.123474	15.37183	3.55542326	3.799744606	0.009376926	7.434030056	178.4167	8.813361168	9.391831398	0.038073275	30.2540703	726.0977173	24	19047.93604
	08	349.9171	717.5094604	2.783781	14.40554	4.96089077	8.415679932	0.020768048	9.235697746	184.714	8.262936592	9.187709808	0.037245814	28.7178745	574.3574829	19.47778	13975.48961
	09	482.5987	824.6468506	3.133774	15.35359	3.25457501	3.461082935	0.008541185	7.045600414	169.0944	8.857665062	9.423130989	0.038200174	31.5055294	756.1326904	24	19791.52441
	10	476.8929	814.8967285	3.130215	15.3599	3.36856365	3.586677074	0.008851126	7.21449852	173.148	8.841608047	9.416016579	0.038171332	31.106741	746.5617676	24	19557.52148
	11	473.1234	808.4558716	3.14147	15.33998	3.66825128	3.891504049	0.009603364	7.768063068	186.4335	8.803769112	9.342485428	0.037873253	30.6236839	734.9683838	24	19402.94092
	12	471.6644	805.9631958	3.140029	15.34252	3.70688367	3.935552835	0.009712071	7.827363968	187.8567	8.468152046	8.987138748	0.036432724	29.3747921	704.9949951	24	19343.1167
	13	470.9727	804.7802124	3.126735	15.36607	3.81805634	4.070086956	0.010044079	8.082314491	177.8109	8.6687603	9.245978355	0.037482023	30.2082138	664.5806885	24	19314.7251
	14	472.5111	807.4089966	3.081112	15.44679	3.95201874	4.275060654	0.010549891	8.479743004	144.1556	8.230088234	8.904211998	0.036096536	29.0066757	493.1134949	24	19377.81592
	15	469.8979	802.9447632	3.111136	15.39367	3.73057246	3.997135401	0.009864053	7.922747612	190.1459	8.191041946	8.776637077	0.035579357	28.5755577	685.8134155	24	19270.67432
	16	472.7806	807.8691406	3.117113	15.38308	3.82803035	4.092648029	0.010099747	8.161419868	195.8741	8.180549622	8.749201775	0.03546815	28.6526623	687.6638794	24	19388.85938
	17	471.6322	805.9069214	3.115779	15.38545	3.79337049	4.056924343	0.010011583	8.073482513	193.7636	8.11075592	8.676948547	0.035175234	28.3562412	680.5498047	24	19341.76611
	18	466.6806	797.4474487	3.13749	15.34702	3.6481421	3.875473261	0.009563809	7.632628918	145.0199	8.014829636	8.515096664	0.034519121	27.5508842	523.4667969	24	19138.73877
	19	466.6566	797.4052734	3.167225	15.29438	3.44916987	3.63804841	0.008977897	7.151692867	171.6406	8.34303093	8.770214081	0.03555331	28.3730335	680.9528198	24	19137.72656
	20	471.0026	804.8318481	3.183189	15.26612	3.32579708	3.49499321	0.008624868	6.920300484	166.0872	9.033823013	9.43337822	0.038241725	30.8551331	740.5231934	24	19315.96436
	21	476.159	813.6431885	3.137973	15.34616	3.83634233	4.075261593	0.010056843	8.17367363	171.6472	8.225043297	8.737740517	0.035421681	28.7920475	604.6329956	24	19527.43652
	22	472.8987	808.0709839	3.143695	15.33601	3.95744371	4.1963377	0.010355543	8.368745804	200.8499	8.237306595	8.734578133	0.035408666	28.6151505	686.7636108	24	19393.70361
	23	467.2198	798.3676758	3.139562	15.34335	4.19846249	4.457016468	0.010998934	8.784082413	210.818	8.148434639	8.651699066	0.035072885	28.0030079	672.0722046	24	19160.82422
	24	420.4067	718.3516846	2.781058	13.88786	6.20630741	11.62647247	0.028691608	12.86328411	257.2657	7.491796494	8.246245384	0.03342922	25.6725769	513.4515381	23.83333	17120.71424
	25	464.909	794.4196167	3.113685	15.38914	4.17634439	4.469018936	0.011028548	8.75726223	201.417	8.063308716	8.632556915	0.034995273	27.7747211	638.8186035	24	19066.0708
	26	467.7665	799.3019409	3.121248	15.37576	3.66920328	3.929012537	0.009695929	7.735404015	185.6497	8.844789505	9.424915314	0.038207415	30.5907173	734.1771851	24	19183.24658

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	27	465.4033	795.2646484	3.116397	15.38436	3.93634057	4.210467339	0.010390504	8.261379242	181.7504	7.925755024	8.477489471	0.034366652	27.3257141	601.1657104	24	19086.35156	
	28	465.1624	794.8515625	3.078661	15.45112	3.91647792	4.241429329	0.010466912	8.320942879	199.7026	7.888335228	8.542355537	0.034629632	27.5246048	660.5905151	24	19076.4375	
	29	464.1149	793.0629883	3.083536	15.4425	3.80956748	4.118114471	0.010162607	8.060354233	193.4485	7.919498444	8.56189537	0.034708839	27.529171	660.7000732	24	19033.51172	
	30	462.0854	789.5938721	3.15349	15.31869	2.90735078	3.093052149	0.007632962	6.027345657	144.6563	7.857015133	8.307359695	0.033676997	26.5957241	638.2974243	24	18950.25293	
Jul02	01	456.6076	780.2332764	3.089258	15.43235	3.13628745	3.399893284	0.008390178	6.537995815	156.9119	8.683890343	9.339373589	0.037860632	29.6246948	710.9926758	24	18725.59863	
	02	466.495	797.1282349	3.124617	15.3698	3.53041005	3.780904293	0.009330434	7.421407223	178.1138	8.895821571	9.459810257	0.038348913	30.6295547	735.109314	24	19131.07764	
	03	464.7114	794.0817261	3.097739	15.41737	4.10434532	4.4168396	0.010899788	8.654813766	207.7155	8.039690018	8.651242256	0.035071034	27.8513412	668.4321899	24	19057.96143	
	04	464.6783	794.0253296	3.091803	15.42787	4.0280323	4.342084408	0.010715309	8.512051582	204.2892	7.990881443	8.615502357	0.03492615	27.7348042	665.6353149	24	19056.60791	
	05	470.2937	803.6206665	3.129896	15.36045	3.82771182	4.089457989	0.010091879	8.087195396	194.0927	8.938428879	9.494000435	0.038487464	31.0080795	744.1939087	24	19286.896	
	06	354.1757	691.6599731	2.745363	14.05057	8.77703857	16.01559258	0.039522924	12.02590084	252.5439	7.238067627	8.031561852	0.032558937	24.3764534	511.9055176	20.25278	14008.03526	
	07	465.4429	795.3302612	3.123219	15.37229	4.8336072	5.158069134	0.012728967	10.12674046	243.0418	7.49087429	7.99516058	0.032411348	25.7789173	618.6940308	24	19087.92627	
	08	465.4616	795.3632813	3.075841	15.45613	5.09147978	5.517213821	0.013615271	10.83209133	259.9702	7.6396842	8.281685829	0.033572901	26.701088	640.8261108	24	19088.71875	
	09	464.9863	794.5512695	3.121819	15.37473	4.29019594	4.612647057	0.011382989	9.0216465	216.5195	8.760048866	9.317079544	0.037770249	30.0803909	721.9293823	24	19069.23047	
	10	460.9092	787.5844116	3.142614	15.33795	4.33948183	4.619897366	0.011400893	8.94867897	214.7683	8.623642921	9.122182846	0.036980178	29.2032871	700.8789063	24	18902.02588	
	11	465.1623	794.8515625	3.120675	15.37678	4.21833658	4.522866726	0.011161435	8.848869324	212.3729	8.986758232	9.568237305	0.038788415	30.9020004	741.6480103	24	19076.4375	
	12	463.7142	792.3776245	3.148211	15.32803	4.11817598	4.381306171	0.010812089	8.551118851	205.2269	9.337641716	9.849277496	0.03992768	31.6945591	760.6694336	24	19017.06299	
	13	458.1317	782.8386841	3.109102	15.39727	4.99449921	5.354831219	0.013214533	10.34584999	248.3004	7.806459427	8.370816231	0.033934221	26.5776463	637.8635254	24	18788.12842	
	14	454.4528	776.5528564	3.134284	15.35268	4.92995262	5.241167545	0.012934046	10.04784966	241.1484	7.378313065	7.84803772	0.031814948	24.7059669	592.9431763	24	18637.26855	
	15	461.5747	788.7206421	3.165063	15.2982	3.97159243	4.194185257	0.010350314	8.125152588	195.0037	9.134139061	9.602316856	0.038926549	30.8202209	739.6853027	24	18929.29541	
	16	468.1121	799.8934326	3.125475	15.36828	4.10307169	4.395172119	0.010846306	8.647432327	198.8909	9.037732124	9.608768463	0.038952753	31.2166214	717.9822998	24	19197.44238	
	17	464.569	793.8375854	3.106198	15.40239	4.71378374	5.065043926	0.012499413	9.92182827	238.1239	7.920661926	8.498380661	0.034451343	27.3582535	656.5980835	24	19052.10205	
	18	463.7421	792.4245605	3.102677	15.40863	4.89163542	5.25488472	0.012967892	10.28240013	246.7776	7.729828358	8.305805206	0.033670671	26.6836379	640.4121094	24	19018.18945	
	19	465.4235	795.2976074	3.132694	15.35551	4.0930562	4.374819756	0.010796079	8.553588867	205.2861	8.835719109	9.371628761	0.037991375	30.3010082	727.2241821	24	19087.14258	
	20	459.7859	785.6646118	3.098352	15.41629	4.48733711	4.827654839	0.011913579	9.360553741	224.6533	7.79453373	8.38630867	0.033997037	26.7122917	641.0949707	24	18855.95068	
	21	466.2664	796.7387085	3.100516	15.41246	4.73964643	5.094978809	0.012573283	10.02127075	240.5105	7.901212692	8.494641304	0.034436204	27.4435825	658.6459961	24	19121.729	
	22	467.2665	798.4474487	3.105921	15.4029	4.7420311	5.088718414	0.012557846	10.0282774	240.6787	7.890720844	8.469079971	0.034332562	27.4248753	658.1970215	24	19162.73877	
	23	465.7471	795.8514404	3.110883	15.39412	5.04728079	5.407958031	0.013345642	10.62103367	254.9048	7.648109913	8.194876671	0.033220984	26.4543991	634.9055786	24	19100.43457	
	24	464.764	794.1708984	3.06448	15.47624	5.09222221	5.552906036	0.013703344	10.86740303	260.8177	7.75574255	8.421920776	0.034141403	27.1486244	651.5670166	24	19060.10156	
	25	465.7142	795.7950439	3.088242	15.43417	4.4970355	4.891863823	0.012072031	9.568129539	229.6351	8.365929604	8.989046097	0.036440443	29.0755825	697.8140259	24	19099.08105	
	26	464.1757	793.1663208	3.071772	15.46331	4.98400688	5.407725811	0.013345075	10.58793545	254.1104	7.628396034	8.278933525	0.033561751	26.619154	638.8596802	24	19035.9917	
	27	463.8431	792.5982666	3.083981	15.44171	4.63439941	5.009762287	0.012362979	9.803103447	235.2745	7.811704636	8.444660187	0.034233592	27.1372871	651.2949219	24	19022.3584	
	28	463.9509	792.781311	3.108654	15.39805	4.81325579	5.161138058	0.012736541	10.09700489	242.3281	7.586423874	8.134652138	0.032976836	26.1506424	627.6154175	24	19026.75146	
	29	468.4478	800.4659424	3.126272	15.36688	4.45045424	4.767197132	0.011764384	9.391951561	225.4068	8.46353054	8.997428894	0.036474448	29.2562084	702.1489868	24	19211.18262	
	30	463.0963	791.3213501	3.133522	15.35405	4.48717976	4.800342083	0.011846184	9.345440865	224.2906	8.283408165	8.782562256	0.035603378	28.2338543	677.6124878	24	18991.7124	
	31	460.5851	787.0307617	3.069418	15.46748	5.08146334	5.517565727	0.013616113	10.72008228	257.282	7.348582268	7.98022604	0.03235082	25.4635124	611.1243286	24	18888.73828	
Aug02	01	464.6014	793.8939819	3.079466	15.44971	4.2052474	4.569702148	0.011277013	8.927897453	160.7021	10.38825607	11.09666252	0.04498446	35.97089	647.4760132	24	19053.45557	
	02	463.5169	792.0395508	3.113426	15.38961	3.94297552	4.242798328	0.010470296	8.26700592	198.4082	8.693114281	9.278288841	0.037612975	29.8591499	716.6196289	24	19008.94922	
	03	364.9165	712.6353149	2.795753	14.45899	5.81350231	9.539164543	0.023540525	11.47553635	240.9863	7.682982445	8.587262154	0.034811676	26.3185196	552.6889038	20.71667	14763.42864	
	04	469.7316	802.6581421	3.102297	15.40931	4.73980618	5.092264652	0.012566588	10.0884552	242.1229	8.088338852	8.691541672	0.035234395	28.2828712	678.7888794	24	19263.79541	
	05	470.2061	803.470459	3.111451	15.39312	4.72690058	5.063034534	0.012494435	10.03907394	230.8987	8.113851547	8.693763733	0.035243407	28.3109131	651.151001	24	19283.29102	
	06	473.4041	808.9346924	3.087739	15.43507	4.60778713	4.972632885	0.012271357	9.916714668	228.0844	8.249887466	8.906867981	0.036107305	29.1628914	670.746521	24	19414.43262	
	07	471.8054	806.2026367	3.09121	15.42892	4.71277666	5.081868649	0.012540909	10.11223221	242.6936	8.187015533	8.828808784	0.035790868	28.856842	692.564209	24	19348.86328	
	08	468.2859	800.1891479	3.116287	15.38456	4.73583078	5.065150738	0.01249967	10.00619793	240.1488	8.052886009	8.614559174	0.034922339	27.9488659	670.7728271	24	19204.53955	
	09	467.6382	799.0811157	3.155651	15.3149	4.13804913	4.3915205	0.010837295	8.640622139	207.3749	9.067362785	9.549902916	0.038714096	30.9897118	743.7531128	24	19177.94678	
	10	460.9942	787.7302246	3.109863	15.39592	4.61675024	4.948336124	0.012211395	9.620679855	230.8963	7.948113918	8.51984024	0.034538355	27.2112617	653.0703125	24	18905.52539	
	11	462.1642	789.7299805	3.117432	15.38253	4.89640522	5.234674931	0.012918	10.20526028	244.9263	7.949545383	8.500984192	0.034461904	27.2186623	653.2479248	24	18953.51953	
	12	465.3412	795.1567383	3.152217	15.32097	4.21912909	4.478502274	0.011051945	8.759861946	210.2367	9.004724503	9.49545002	0.038493343	30.6891003	736.5383911	24	19083.76172	
	13	464.1872	793.1851196	3.169197	15.2909	4.29751062	4.538034439	0.011198864	8.864472389	212.7473	8.982786179	9.424610138	0.038206153	30.3616543	728.6796875	24	19036.44287	
	14	464.1703	793.1568604	3.150247	15.32442	4.22363567	4.482560158	0.011061963	8.748726845	209.9695	9.1036129	9.611190796	0.038962547	30.975296	743.4071045	24	19035.76465	
	15	463.1893	791.4810181	3.139117	15.34413	4.29926014	4.589302063	0.011325374	8.939409256	214.5458	8.96720314	9.48703289	0.038459219	30.5080299	732.192688	24	18995.54443	
	16	462.8489	790.8988037	3.168306	15.29247	4.39782906	4.646877289	0.011467468	9.044200897	217.0608	8.873566628	9.305839539	0.0377247	29.9119053	717.8856812	24	18981.57129	
	17	458.1849	782.9278564	3.138481	15.34525	5.0331316	5.345443249	0.013191367	10.33012772	247.9231	7.620923519	8.094675064	0.032814775	25.6918755	616.6049805	24	18790.26855	
	18	458.593	783.6272583	3.144141	15.33523	4.52819681	4.800323009	0.011846137	9.284432411	222.8264	8.004076958	8.487112045	0.034405664	26.96208	647.0899048	24	18807.0542	
	19	461.7693	789.053833	3.135937	15.34976	4.54981804	4.835947037	0.011934037	9.417945862	226.0307	8.058768272	8.566413879	0.034727149	27.4038925	657.6934204	24	18937.29199	
	20	466.6871	797.4570313	3.210151	15.21838	3.51768994	3.6740942	0.009066857	7.237755775	173.7061	8.324272156	8.644780159	0.035044849	27.9481659	670.7559814	24	19138.96875	
	21	470.3081	803.644104	3.136513	15.34873	3.65681005	3.927328825	0.009691781	7.770664692	178.7253	8.495800972	9.026443481	0.03659204	29.407383	676.369812	24	19287.4585	
	22	468.7752	801.0247803	3.100071	15.41323	4.77430582	5.13241291	0.012665663	10.14615059	243.5076	8.133171082	8.749159813	0.035467979	28.4192123	682.0610962	24	19224.59473	
	23	469.9451	803.0244751	3.125761	15.36778	5.0255022	5.358908653	0.013224588	10.62752914	255.0607	8.053204536	8.58912468	0.034819212	27.968092	671.2341919	24	19272.5874	
	24	466.5472	797.2175903	3.127734	15.36429	5.06954098	5.403353214	0.013334284	10.63355637	255.2054	7.917429924	8.43872261	0.034209508	27.276104	654.6265259	24	19133.22217	
	25	467.8522	799.4473877	3.121692	15.37498	5.20197392	5.553431034	0.013704642	10.96172142	263.0813	7.962264538	8.502462387	0.034467906	27.5562916	661.3510132	24	19186.7373	
	26	468.0685	799.8182983	3.126145	15.36711	4.96492767	5.293036461	0.013062046	10.45358467	250.886	8.155590057	8.697169304	0.035257209	28.2036991	676.8887939	24	19195.63916	
	27	468.9586	801.3392334	3.151772	15.32175	3.9606216	4.211099625	0.010392064	8.298516273	199.1644	9.412528038	9.923637662	0.04022998	32.3139915	775.5358276	24	19232.1416	

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	28	466.4808	797.1048584	3.028014	15.54076	4.03079605	4.442631721	0.010963415	8.713681221	200.4147	9.10608387	10.01711369	0.040608127	32.4350128	746.0053101	24	19130.5166
	29	466.0497	796.3677979	3.072343	15.46232	4.38717604	4.775953293	0.011785991	9.371669769	224.9201	8.550824165	9.265018463	0.0375592	29.9538994	718.8936157	24	19112.82715
	30	467.1009	798.1657715	3.138673	15.34493	4.26062775	4.545190811	0.011216521	8.922197342	214.1327	8.956077576	9.486060143	0.038455278	30.7632122	738.3170776	24	19155.97852
	31	365.3706	681.0690918	2.708472	13.73133	6.33359814	10.35783958	0.025560882	10.63767529	234.0289	6.971500397	7.666985512	0.031080963	23.5869141	518.9121094	21.02778	14321.37009
Sep02	01	463.4397	791.90802	3.108784	15.39783	5.29736471	5.678791046	0.014014	11.10525131	266.526	7.715362072	8.273975372	0.033541638	26.5660667	637.5855713	24	19005.79248
	02	463.0741	791.2838135	3.097464	15.41786	5.25094175	5.649526596	0.013941779	11.03675461	264.8821	7.739049911	8.329339027	0.033766076	26.7209702	641.3032837	24	18990.81152
	03	468.1593	799.9730225	3.127479	15.36473	4.48479414	4.804902077	0.011857431	9.462234497	227.0936	8.901861191	9.458046913	0.038341686	30.7308254	737.5397949	24	19199.35254
	04	465.228	794.9641113	3.083155	15.44318	5.12613869	5.543008804	0.013678913	10.87227917	260.9347	7.844932079	8.480617523	0.034379341	27.3380127	656.1123047	24	19079.13867
	05	474.4996	810.8075562	3.099244	15.41471	5.44649315	5.857180595	0.014454229	11.72252083	281.3405	8.157178879	8.774039268	0.035568833	28.8412037	692.1889038	24	19459.38135
	06	474.5849	810.9533691	3.098988	15.41516	5.28798532	5.686294079	0.014032513	11.38300037	273.192	8.159086227	8.777006149	0.03558087	28.85532	692.52771	24	19462.88086
	07	477.7752	816.4034424	3.096699	15.41921	4.80514908	5.171753407	0.012762746	10.42052746	250.0927	8.431902885	9.077857018	0.036800474	30.047575	721.1417847	24	19593.68262
	08	478.9013	818.328186	3.080271	15.4483	5.16434908	5.589016914	0.013792458	11.28942871	270.9463	8.304450989	8.988790512	0.036439404	29.8194714	715.6672974	24	19639.87646
	09	473.0438	808.3196411	3.078575	15.4513	4.73821688	5.135028362	0.012672109	10.25575924	246.1382	8.230630875	8.916795731	0.03614755	29.2284203	701.4821167	24	19399.67139
	10	472.1481	806.7893066	3.115777	15.38545	4.17302608	4.480336666	0.011056477	8.896446228	213.5147	9.037319183	9.64683342	0.039107062	31.6112213	758.6693115	24	19362.94336
	11	472.6923	782.4534302	3.120028	15.39208	4.03329325	4.340842724	0.010717117	8.386148453	184.4953	9.259493828	9.89111042	0.040118776	31.4194508	691.2279053	24	18778.88232
	12	468.4397	764.6414795	3.092567	15.44773	4.8625412	5.260311604	0.012991313	9.936922073	238.4861	8.101058006	8.765906334	0.03556335	27.1977882	652.7468872	24	18351.39551
	13	468.7997	765.2288818	3.097592	15.43886	5.28385067	5.707699776	0.014096233	10.78791142	258.9099	7.983408928	8.624788284	0.034990821	26.7783089	642.6793823	24	18365.49316
	14	466.4443	761.3859253	3.101597	15.43181	5.18893671	5.598121643	0.013825596	10.52853966	252.685	7.780862331	8.395140648	0.034059137	25.9399338	622.5584106	24	18273.26221
	15	466.6237	761.6773682	3.103059	15.42922	4.88050795	5.260377407	0.012991488	9.905073166	237.7218	7.912184238	8.533103943	0.034618866	26.3712883	632.9108887	24	18280.25684
	16	474.8488	775.1035156	3.105795	15.42439	5.0555501	5.446863174	0.01345205	10.42940998	250.3058	8.141282082	8.772537231	0.035590239	27.585762	662.0582886	24	18602.48438
	17	473.1023	772.2515259	3.09441	15.44447	5.01643944	5.424041748	0.013395688	10.35231304	248.4555	8.12283802	8.784578323	0.035639092	27.5258789	660.6210938	24	18534.03662
	18	472.9889	772.067688	3.104968	15.42585	4.170959	4.513895035	0.011147904	8.580237389	205.9257	9.019191742	9.695040703	0.039332874	30.4314671	730.3552246	24	18529.62451
	19	469.1731	765.8388062	3.121311	15.39704	3.96332502	4.275531769	0.010559218	8.062532425	193.5008	9.112201691	9.737230301	0.039504018	30.3096542	727.4317017	24	18380.13135
	20	463.687	756.883606	3.08907	15.45388	4.70387554	5.093451023	0.012579221	9.524915695	228.598	7.921564102	8.582769394	0.034820359	26.3645954	632.7503052	24	18165.20654
	21	464.0085	757.4083252	3.088051	15.45568	5.04505587	5.466739178	0.013501121	10.23036003	245.5286	7.71393013	8.359823227	0.033915851	25.6928673	616.6287842	24	18177.7998
	22	464.1593	757.6549072	3.095128	15.44144	5.16667986	5.582814693	0.013787796	10.45276451	250.8664	7.684836388	8.305984497	0.033697434	25.5361118	612.8666992	24	18183.71777
	23	466.8712	762.0809326	3.126588	15.38773	4.28908539	4.61170435	0.011389445	8.655894279	207.7415	8.808218002	9.401579857	0.038142294	29.1234913	698.9638062	24	18289.94238
	24	467.808	763.6100464	3.122964	15.39411	4.19862175	4.521206856	0.011165962	8.498936653	203.9745	8.920941353	9.530813217	0.038666595	29.589571	710.1497192	24	18326.64111
	25	467.3979	762.9420166	3.058418	15.50791	4.02978086	4.422690392	0.010922652	8.305837631	199.3401	9.03970623	9.86739254	0.040032063	30.6190548	734.8572998	24	18310.6084
	26	470.118	767.3814697	3.077242	15.47473	3.81340218	4.172286987	0.010304235	7.886901855	189.2856	9.206163406	9.977757454	0.040479809	31.1191254	746.8590088	24	18417.15527
	27	470.9918	768.8075562	3.101088	15.4327	4.19083071	4.521897793	0.011167675	8.587632179	206.1032	8.325065613	8.984600067	0.036450583	28.0254326	672.6104126	24	18451.38135
	28	439.9174	718.0845337	2.901531	14.47826	4.85888481	7.441662312	0.018378571	9.398927689	225.5743	7.746362686	8.41113472	0.034124032	26.0153904	624.3693848	24	17234.02881
	29	93.23896	608.5670166	2.529507	12.95707	5.06016016	7.764209747	0.019175168	7.783351421	46.70011	7.624264717	8.560773849	0.034731068	24.6015339	147.6091919	5.052778	3074.953891
	30	471.195	769.1394043	3.110882	15.41543	3.27905583	3.530630112	0.008719554	6.705432415	160.9304	8.929526329	9.601588249	0.038953755	29.9778881	719.4692993	24	18459.3457
Oct02	01	476.9728	778.5700684	3.081756	15.46677	3.98192501	4.324003696	0.010678933	8.315608978	199.5746	8.805517197	9.562194824	0.038793888	30.2053337	724.9279785	24	18685.68164
	02	475.8303	776.7044678	3.034784	15.54959	3.77332616	4.153560638	0.010257994	7.98499012	183.6548	9.094633102	10.02990246	0.040691365	31.5645142	725.9838257	24	18640.90723
	03	478.9701	781.8300171	3.072026	15.48392	4.23359966	4.61342144	0.011393704	8.912093163	213.8902	8.879921913	9.676218987	0.039256461	30.7012177	736.8292236	24	18763.92041
	04	418.1343	712.2030029	2.847454	14.28964	3.6293273	3.940731287	0.009732373	7.508668423	172.6994	8.174902916	8.876577377	0.036012355	27.7715092	638.744751	23	16380.66907
	05															0	0
	06															0	0
	07															0	0
	08															0	0
	09															0	0
	10															0	0
	11															0	0
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	18															0	0
	19															0	0
	20															0	0
	21															0	0
	22															0	0
	23															0	0
	24															0	0
	25	333.9396	769.512085	3.103558	15.01852	9.61313915	14.53030682	0.035885286	16.44351768	279.5398	8.371715546	8.890855789	0.036070257	28.1269302	478.1578064	16.56667	12748.25089
	26	493.3274	805.2654419	3.215938	15.23019	3.977952	4.138240337	0.010220158	8.232797623	197.5872	8.742242813	9.097237587	0.036907557	29.7215328	713.3167725	24	19326.37061
	27	492.3304	803.6376343	3.211424	15.23817	4.25522184	4.433280945	0.010948816	8.801192284	211.2286	8.577373505	8.938216209	0.036262404	29.1457539	699.4981079	24	19287.30322
	28	493.524	805.5883179	3.192472	15.27157	4.4065733	4.617990017	0.011404984	9.188998222	220.536	8.48007679	8.888875008	0.036062233	29.0517159	697.2412109	24	19334.11963

Unit 1 - CEMS Data

	29	489.2913	798.6777954	3.195014	15.2671	4.14949608	4.345260143	0.010731442	8.57174778	205.7219	8.616325378	9.025383949	0.03661605	29.2475452	701.9411011	24	19168.26709	
	30	484.4477	790.7719727	3.190056	15.27584	3.63057137	3.801680803	0.009388951	7.450195789	178.8047	8.67133522	9.09663868	0.036905129	29.1846371	700.4312744	24	18978.52734	
	31	491.9315	802.9874268	3.202902	15.2532	4.11133909	4.294592857	0.010606284	8.519950867	204.4788	8.812195778	9.20734024	0.037354253	29.9950409	719.8809814	24	19271.69824	
Nov02	01	495.6512	809.0593872	3.197306	15.26306	4.42692518	4.632104397	0.011439829	9.257385254	222.1772	8.861638069	9.275240898	0.037629724	30.444891	730.6774292	24	19417.42529	
	02	495.5133	808.835144	3.194382	15.26821	4.43519258	4.64538002	0.011472623	9.282221794	222.7733	8.884055138	9.306982994	0.037758503	30.5415878	732.9981079	24	19412.04346	
	03	493.2828	805.1937256	3.193555	15.26968	4.01229286	4.20298624	0.010380055	8.366859436	200.8046	8.849238396	9.27322197	0.037621535	30.2929287	727.0302734	24	19324.64941	
	04	493.2145	805.081543	3.203411	15.25228	4.32216357	4.514153481	0.01114854	8.976456642	215.435	8.832386017	9.226748466	0.037432987	30.1390533	723.3372803	24	19321.95703	
	05	489.3348	798.7497559	3.177401	15.29815	4.15013313	4.362330437	0.01077359	8.644867897	207.4768	9.399801254	9.945715904	0.040349826	31.8012753	763.2305908	24	19169.99414	
	06	491.0168	801.4940186	3.200283	15.25781	4.4453721	4.646446705	0.01147527	9.203765869	211.6866	8.607230186	9.000440598	0.03651486	29.2646122	673.0861206	24	19235.85645	
	07	486.7672	794.5567627	3.198535	15.2609	4.19046068	4.382074833	0.010822344	8.605991364	206.5438	8.23555851	8.617511749	0.034961302	27.7833633	666.8007202	24	19069.3623	
	08	480.7715	784.7718506	3.192535	15.27146	3.96496868	4.155343533	0.010262391	8.055716515	193.3372	7.698986053	8.070370674	0.032741554	25.6946621	616.671875	24	18834.52441	
	09	485.8783	793.1083984	3.218609	15.22549	4.30784321	4.477381229	0.011057726	8.77676487	210.6424	7.779271603	8.08830452	0.032814313	26.0273495	624.6563721	24	19034.60156	
	10	495.0858	808.1355591	3.200231	15.2579	5.02979183	5.260549545	0.012991904	10.4996624	251.9919	7.983092308	8.347619057	0.033866353	27.3696003	656.8704224	24	19395.25342	
	11	494.3649	806.9606323	3.189865	15.27618	5.37049723	5.632860184	0.013911388	11.22935009	269.5044	7.867351532	8.253643036	0.0334851	27.0219078	648.5258179	24	19367.05518	
	12	488.6701	797.6645508	3.205128	15.24927	4.82279539	5.035371304	0.012435787	9.933092117	238.3942	7.845727444	8.191987038	0.03323495	26.514967	636.3591919	24	19143.94922	
	13	490.7039	800.9829102	3.154826	15.33793	4.31978893	4.581185818	0.011314087	9.061447144	208.4133	7.935624123	8.41888237	0.034155454	27.350256	629.0559082	24	19223.58984	
	14	489.4607	798.9873047	3.200867	15.25677	4.20227909	4.402564526	0.010872959	8.673782349	208.1708	8.130310059	8.499534607	0.034482665	27.5586128	661.4066772	24	19175.69531	
	15	489.5026	799.0231934	3.210343	15.24005	4.22882795	4.407423973	0.010884949	8.703696251	208.8887	8.03937149	8.381459236	0.034003634	27.1755371	652.2128906	24	19176.55664	
	16	490.0117	799.8529053	3.214032	15.23358	4.43805218	4.619923592	0.011409746	9.137947083	219.3107	8.101057053	8.436097145	0.0342253	27.3876457	657.3035278	24	19196.46973	
	17	491.9319	802.9874268	3.197242	15.26317	4.1099081	4.300565243	0.010621049	8.532309532	204.7754	8.142711639	8.522674561	0.034576558	27.7671967	666.4127197	24	19271.69824	
	18	491.8187	802.8036499	3.190281	15.27544	4.19181538	4.397074699	0.010859406	8.721450806	191.8719	8.093296051	8.489233971	0.034440886	27.6602821	608.5261841	24	19267.2876	
	19	492.5887	804.0592041	3.189939	15.27604	4.39324236	4.60913372	0.011383105	9.148609161	192.1208	8.068119049	8.464749336	0.034341544	27.5952091	579.4993896	24	19297.4209	
	20	485.3437	792.2338257	3.207052	15.24587	4.01221752	4.18583107	0.010337689	8.190999985	188.393	8.011052132	8.360337257	0.03391793	26.8726215	618.0703125	24	19013.61182	
	21	482.5741	787.7136841	3.222194	15.21917	4.19649839	4.356246948	0.01075856	8.469002724	186.3181	7.988713264	8.297476768	0.033662908	26.4777718	582.5109863	24	18905.12842	
	22	481.6373	786.1843872	3.243476	15.18167	3.99671197	4.122532845	0.010181364	8.008198738	192.1968	8.003281593	8.258434296	0.033504516	26.3470535	632.3292847	24	18868.42529	
	23	490.7629	801.081665	3.237052	15.19296	3.81865072	3.947217941	0.009748385	7.811041355	187.465	8.270693779	8.550523758	0.034689546	27.7892876	666.9428711	24	19225.95996	
	24	492.0887	803.242981	3.222233	15.2191	3.9332788	4.084843636	0.010088284	8.10375309	194.4901	8.132377625	8.445788383	0.034264624	27.5232201	660.557312	24	19277.83154	
	25	492.8161	804.4313965	3.221153	15.221	3.72691488	3.870803356	0.009559665	7.694088936	184.6581	8.273554802	8.595571518	0.034872297	28.0523491	673.2564087	24	19306.35352	
	26	494.4483	807.0950928	3.071998	15.48397	3.83574724	4.179214001	0.01032135	8.325961113	183.1711	8.34113884	9.100780487	0.036921937	29.7741222	655.0307007	24	19370.28223	
	27	498.0603	812.9922485	3.133967	15.37472	3.7130847	3.957094193	0.009772774	7.947576523	190.7418	8.496292114	9.099655151	0.036917359	30.0130081	720.3121948	24	19511.81396	
	28	498.8625	814.3015137	3.218227	15.22616	3.96968532	4.127280712	0.010193085	8.302219391	199.2533	8.289611816	8.619714737	0.034970257	28.479229	683.5014648	24	19543.23633	
	29	501.1594	818.0504761	3.214603	15.23256	3.67079425	3.820820808	0.009436227	7.720727444	185.2975	8.335402489	8.677602768	0.035205085	28.8012161	691.229187	24	19633.21143	
	30	496.381	810.2523193	3.226178	15.21215	3.92055917	4.066252708	0.010042366	8.136955261	195.2869	8.048116684	8.348436356	0.033869669	27.4442368	658.6616821	24	19446.05566	
Dec02	01	496.7145	810.7946777	3.224651	15.21485	3.88017631	4.026319027	0.009943745	8.061974525	193.4874	8.050976753	8.355219841	0.033897188	27.4844341	659.6264038	24	19459.07227	
	02	496.4063	810.2926025	3.214603	15.23256	3.49877381	3.641788483	0.008994075	7.290576935	174.9738	8.317435265	8.658895493	0.035129208	28.4658699	683.1809082	24	19447.02246	
	03	495.8078	809.3149414	3.220009	15.22303	3.65282917	3.79528594	0.00937316	7.587433815	182.0984	8.263538361	8.588307381	0.034842819	28.2021084	676.8505859	24	19423.55859	
	04	492.5804	804.0456543	3.202903	15.2532	3.57349586	3.732644081	0.009218458	7.415092945	177.9622	8.303127289	8.675173759	0.035195228	28.3007545	679.2180786	24	19297.0957	
	05	488.9064	798.0501709	3.21382	15.23394	3.51684833	3.661465168	0.009042671	7.217201233	165.9956	8.344780922	8.690207481	0.035256233	28.1367645	647.1455688	24	19153.2041	
	06	484.088	790.1846313	3.212502	15.23625	3.22436452	3.358002186	0.008293212	6.554497242	157.3079	8.395178795	8.745567322	0.035480835	28.0372124	672.8931274	24	18964.43115	
	07	485.7858	792.9558105	3.226241	15.21203	3.4296155	3.557057381	0.008784817	6.967416286	167.218	8.240962029	8.54807663	0.034679595	27.5001907	660.0045776	24	19030.93945	
	08	486.6286	794.3325195	3.214794	15.23223	3.74535871	3.89800334	0.009626843	7.64845705	183.563	8.184843063	8.51980114	0.034564905	27.4578495	658.9884033	24	19063.98047	
	09	485.8821	793.112854	3.206018	15.24769	3.62468743	3.782596588	0.009341819	7.411943436	177.8866	8.277370453	8.64086628	0.035056051	27.8046207	667.3109131	24	19034.7085	
	10	487.5874	795.897644	3.209389	15.24173	3.62786841	3.782284498	0.009341055	7.436306953	178.4714	8.088974953	8.434810638	0.034220088	27.2356243	653.6549683	24	19101.54346	
	11	488.3405	797.1262207	3.189038	15.27764	3.6525104	3.832224607	0.00946439	7.545701027	181.0968	8.18484211	8.589064598	0.034845892	27.7766171	666.6387939	24	19131.0293	
	12	489.3019	798.6959839	3.197814	15.26216	3.61101532	3.778353691	0.009331351	7.456933975	178.9664	8.30694294	8.69362545	0.03527011	28.1749535	676.1989136	24	19168.70361	
	13	486.1758	793.5926514	3.200994	15.25656	3.4184854	3.572547913	0.008823073	7.004221916	168.1013	8.297880173	8.675757408	0.035197616	27.9324703	670.3792725	24	19046.22363	
	14	484.2504	790.4489746	3.198642	15.2607	3.46347785	3.622795343	0.008947166	7.074922562	169.7981	8.238737106	8.619726181	0.034970284	27.6429119	663.4299316	24	18970.77539	
	15	484.168	790.3145752	3.210088	15.24052	3.18430209	3.319553852	0.008198257	6.479801655	155.5152	8.190883636	8.539148331	0.034643386	27.3802624	657.1262817	24	18967.5498	
	16	483.1617	788.6733398	3.199531	15.25913	3.02038956	3.15913868	0.007802081	6.154131413	147.6992	8.35241127	8.737074852	0.035446368	27.9584084	671.0018311	24	18928.16016	
	17	489.5406	799.0858765	3.217084	15.22819	3.27776578	3.408532143	0.008418005	6.733453751	161.6029	8.517437935	8.860147476	0.035945684	28.7237911	689.3710327	24	19178.06104	
	18	497.3792	811.8798828	3.200739	15.257	4.12252188	4.31034708	0.010645207	8.644339561	207.4642	8.40582943	8.787956238	0.035652809	28.9484329	694.7623901	24	19485.11719	
	19	482.5219	787.6286011	3.097717	15.00323	4.24568367	6.339811802	0.015657343	8.70371151	208.8891	8.338579178	8.850672722	0.035907242	28.8030777	691.2738647	24	18903.08643	
	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	
	21	5.24727	68.5215683	0.277778	9.960277	8.74413681	45.10516739	0.111395471	14.5618763	43.68563	2.174910069	6.934900761	0.028134892	6.52544308	19.57633018	2.219444	152.0797861	
	22	494.1914	806.6766357	3.177505	15.29797	6.11491108	11.11161518	0.027442116	9.648527145	231.5646	9.535787582	10.11901569	0.041052952	32.5442238	781.0614014	23.73889	19149.60767	
	23	504.7934	823.9834595	3.215812	15.23044	3.41450906	3.5524683	0.008773483	7.232021332	173.5685	9.187714577	9.561197281	0.038789839	31.9615421	767.0770264	24	19775.60303	
	24	505.7942	825.6158447	3.209897	15.24085	3.69453573	3.849956751	0.009508168	7.855418682	188.53	8.852893829	9.22843647	0.037439827	30.9157791	741.9786987	24	19814.78027	
	25	507.2065	827.9207764	3.20869	15.24298	3.80545378	3.96848011	0.009800901	8.121581078	194.9179	8.955280304	9.339870453	0.037891932	31.373991	752.975769	24	19870.09863	
	26	544.2944	888.460022	3.203601	15.25196	3.6075182	3.767955303	0.009305664	8.278013229	198.6723	8.788028717	9.179948807	0.037243117	33.0921326	794.2111816	24	21323.04053	
	27	533.9451	871.5674438	3.186495	15.28212	3.36919999	3.538300753	0.008738494	7.617007732	182.8082	8.462587357	8.887327194	0.036055963	31.4291077	754.298584	24	20917.61865	
	28	554.9373	905.8325806	3.171741	15.30814	2.58349919	2.724425077	0.006728476	6.104176998	146.5002	8.895186424	9.386160851	0.03807927	34.4942093	827.8609619	24	21739.98193	
	29	566.9695	925.4740601	3.217528	15.22738	2.93867159	3.055681229	0.007546577	6.987103462	167.6905	8.95416832	9.313268661	0.037784003	34.9684601	839.242981	24	22211.37744	

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	30	566.8873	925.3395996	3.223506	15.21686	3.12515926	3.247396708	0.008020054	7.429111958	178.2987	8.816487312	9.151088715	0.037126027	34.355484	824.5316162	24	22208.15039	
	31	564.3025	921.1196899	3.23807	15.1912	2.84778452	2.95668745	0.007302091	6.727419853	161.4581	8.967523575	9.264072418	0.037584417	34.6222191	830.9332886	24	22106.87256	
Jan03	01	568.1017	927.3217773	3.197624	15.2625	3.34869123	3.503926992	0.008653602	8.029560089	192.7095	8.748441696	9.155659676	0.037144579	34.4474373	826.7385254	24	22255.72266	
	02	541.4922	883.8859253	3.20163	15.25544	3.41943908	3.573328257	0.008824996	7.827805519	187.8673	8.620936394	9.010925293	0.036557388	32.3375778	776.1019287	24	21213.26221	
	03	502.2774	819.8757324	3.211297	15.23839	3.20894384	3.343492985	0.008257378	6.771584988	162.518	8.605036736	8.9674263	0.036380917	29.8312874	715.9509277	24	19677.01758	
	04	497.673	812.3598022	3.211359	15.23828	3.85458112	4.016451836	0.00991937	8.056778908	193.3627	8.398834229	8.752222061	0.035507824	28.8524075	692.4578247	24	19496.63525	
	05	495.2835	808.458313	3.195397	15.2664	3.73518252	3.909559727	0.009655389	7.809442043	187.4266	8.497246742	8.899342537	0.036104698	29.1890793	700.5379028	24	19402.99951	
	06	497.3656	811.8574829	3.19826	15.26138	3.5615716	3.725712538	0.00920134	7.473157883	179.3558	8.582939148	8.960891228	0.036435537	29.5822792	709.9746704	24	19484.57959	
	07	501.2033	818.1223145	3.203601	15.25196	3.94965339	4.124123096	0.010185283	8.337833405	200.108	8.649395943	9.034791946	0.036654223	29.9900875	719.762085	24	19634.93555	
	08	498.5609	813.8082275	3.205574	15.24848	3.68208218	3.843295336	0.009491734	7.726778507	185.4427	8.689300537	9.071619034	0.036803614	29.9537258	718.8894043	24	19531.39746	
	09	492.4996	803.9156494	3.196268	15.2649	3.64805865	3.819131136	0.009432056	7.584517479	182.0284	8.511660576	8.910936356	0.036151737	29.0670795	697.6099243	24	19293.97559	
	10	492.2968	803.5838013	3.208307	15.24366	3.75855303	3.919564486	0.009680097	7.780775547	186.7386	8.346529007	8.706547737	0.035322513	28.3849049	681.2376709	24	19286.01123	
	11	495.7526	809.2252808	3.206653	15.24658	3.77524638	3.938892126	0.009727824	7.873731136	188.9695	8.354478836	8.71869278	0.035371788	28.6251793	687.0042725	24	19421.40674	
	12	496.8378	810.996521	3.21155	15.23794	3.9116559	4.074977398	0.010063918	8.16505146	195.9612	8.234602928	8.580677032	0.034811877	28.2365246	677.6765747	24	19463.9165	
	13	498.0879	813.0369263	3.192917	15.27079	3.98017716	4.170079231	0.010298794	8.378108025	201.0746	8.226494789	8.621928215	0.034979217	28.4417419	682.6018066	24	19512.88623	
	14	501.0003	817.7903442	3.171203	15.30907	4.05792141	4.281647205	0.010574326	8.639936447	190.0786	8.338710785	8.799440384	0.03569939	29.1643772	641.616272	24	19626.96826	
	15	501.7833	819.0685425	3.187257	15.28078	4.07429647	4.276929379	0.010562672	8.653300285	207.6792	8.336036682	8.752417564	0.035508603	29.0840836	698.0180054	24	19657.64502	
	16	498.5877	813.8531494	3.192472	15.27158	4.21706438	4.4196105	0.010915047	8.887898445	213.3096	8.414096832	8.819832802	0.035782121	29.1262455	699.0299072	24	19532.47559	
	17	499.0847	814.6647949	3.201311	15.256	4.08510685	4.27022934	0.010546131	8.593753815	206.2501	8.627773285	9.019146919	0.036590751	29.80937	715.4249268	24	19551.95508	
	18	498.9227	814.4001465	3.213332	15.2348	4.01086235	4.177062511	0.010316032	8.403468132	201.6832	8.773880005	9.137646675	0.037071496	30.1908951	724.5814819	24	19545.60352	
	19	498.8869	814.3419189	3.211169	15.23862	4.03200626	4.201031208	0.010375218	8.453048706	202.8732	8.752257347	9.120973587	0.037003871	30.134716	723.2332153	24	19544.20605	
	20	503.9474	822.602356	3.204111	15.25106	4.39258432	4.587556362	0.011329825	9.322191238	223.7326	8.807106018	9.198370934	0.037317865	30.7001286	736.8031006	24	19742.45654	
	21	497.8105	812.5841064	3.201884	15.25498	4.24154711	4.431117535	0.010943461	8.900525093	213.6126	8.499470711	8.88288784	0.036037933	29.2962074	703.1090088	24	19502.01855	
	22	491.9616	803.0366821	3.197752	15.26227	3.9480629	4.129934788	0.010199643	8.19492054	196.6781	8.329835892	8.717638969	0.035367526	28.4046917	681.7125854	24	19272.88037	
	23	491.2196	801.8259888	3.189312	15.27715	3.97726703	4.172471523	0.010304689	8.265860558	190.1148	8.14564991	8.546912193	0.034674902	27.804287	639.4985962	24	19243.82373	
	24	491.3814	802.0905151	3.210724	15.2394	4.00672817	4.175010681	0.010310964	8.271965027	198.5272	8.002010345	8.340993881	0.033839468	27.1425037	651.420105	24	19250.17236	
	25	491.1921	801.7811279	3.206209	15.24736	3.87238503	4.040809155	0.009979535	8.004043579	192.097	8.02983284	8.381201744	0.034002595	27.2629337	654.3104248	24	19242.74707	
	26	489.2774	798.6553345	3.201756	15.25521	3.98494697	4.164978981	0.010286196	8.215530396	197.1727	7.994537354	8.35578537	0.033899475	27.0757294	649.8175049	24	19167.72803	
	27	491.2476	801.8707275	3.209579	15.24143	3.87429333	4.03894186	0.009974921	8.000796318	192.0191	8.243508339	8.59522438	0.034670885	27.9629955	671.1118774	24	19244.89746	
	28	490.4091	800.5031128	3.219118	15.22459	3.86141706	4.013614655	0.009912364	7.936880112	190.4851	8.197402954	8.521855354	0.034573235	27.6761379	664.2272949	24	19212.07471	
	29	491.3273	802.0007324	3.193109	15.27045	4.40609884	4.618684292	0.011406687	9.150265694	219.6064	8.093267441	8.48187542	0.034411021	27.5980587	662.3533936	24	19248.01758	
	30	490.1051	800.005188	3.199341	15.25947	4.55808592	4.766968727	0.011772905	9.421466827	226.1152	8.052090645	8.422437668	0.03416989	27.3371506	656.0916138	24	19200.12451	
	31	489.5883	799.1621704	3.200676	15.25712	4.26444197	4.457773209	0.011009312	8.801673889	211.2402	8.246528625	8.621834755	0.034978841	27.9561672	670.947998	24	19179.89209	
Feb03	01	492.2975	803.5838623	3.216002	15.2301	3.7666595	3.920666218	0.009682816	7.78253603	186.7809	8.559250832	8.907097816	0.036136158	29.0400543	696.9613037	24	19286.0127	
	02	495.6729	809.0951538	3.204683	15.25005	3.63375163	3.792544127	0.009366393	7.585426807	182.0502	8.68341732	9.067866325	0.036788397	29.7663383	714.3920898	24	19418.28369	
	03	496.8187	810.9651489	3.192471	15.27159	3.62612033	3.800171614	0.009385235	7.618503571	182.8441	8.675309181	9.093677521	0.036893122	29.9239883	718.1757202	24	19463.16357	
	04	518.2139	845.8896484	3.173077	15.30578	3.4091804	3.593353033	0.008874455	7.506046772	172.6391	8.804812431	9.286417007	0.03767506	31.7646427	730.586792	24	20301.35156	
	05	494.8105	807.6871338	3.169452	15.31215	3.31514549	3.499691963	0.008643144	6.985121727	167.6429	8.900430679	9.397867203	0.038127214	30.7963676	739.112793	24	19384.49121	
	06	493.011	804.7497559	3.155079	15.3375	2.86426544	3.035219669	0.007496039	6.043982029	145.0556	9.106473923	9.659182549	0.039187379	31.5372124	756.8931274	24	19313.99414	
	07	487.0631	795.0410156	3.234698	15.19713	2.16250706	2.249365091	0.005555226	4.394720078	105.4733	9.472616196	9.800085068	0.039759036	31.6286507	759.0875854	24	19080.98438	
	08	494.4504	807.0995483	3.178608	15.29602	3.02213717	3.178754091	0.007850522	6.34844017	152.3626	9.091848373	9.572286606	0.038834836	31.3426838	752.2244263	24	19370.38916	
	09	494.107	806.5390625	3.174347	15.30352	3.04201078	3.204009056	0.007912898	6.393514633	153.4444	8.929206848	9.412953377	0.038188409	30.8032284	739.2775269	24	19356.9375	
	10	491.0628	801.5703735	3.162519	15.32437	2.88779497	3.053591728	0.007541412	6.054855347	145.3165	8.899636269	9.417342186	0.038206235	30.6257629	735.0183105	24	19237.68896	
	11	483.3272	788.9421387	3.16837	15.31407	2.45291996	2.590605497	0.006397981	5.050607204	121.2146	8.681034088	9.170084	0.0372031	29.356245	704.5499268	24	18934.61133	
	12	479.4619	782.6327515	3.193363	15.27	2.19668665	2.301625729	0.005684291	4.45003891	106.8009	8.583415031	8.995347977	0.036494173	28.5609283	685.4622803	24	18783.18604	
	13	481.4863	785.9378052	3.210214	15.2403	2.7758708	2.893240452	0.007145393	5.616786003	134.8029	8.323158264	8.676437378	0.035200357	27.6682587	664.038208	24	18862.50732	
	14	488.2588	796.9916992	3.22039	15.22235	3.489393	3.625522852	0.008953905	7.137611389	171.3027	8.142393112	8.461318016	0.034327637	27.3591003	656.6184082	24	19127.80078	
	15	320.0504	696.4927979	2.802225	13.83089	3.66484165	5.269482136	0.013013978	7.40119648	133.2215	7.274287701	8.078224182	0.032773424	24.5166664	441.2999878	17.65833	12298.90163	
	16	493.0306	804.781189	3.188655	15.27831	3.62977624	3.808535814	0.00940589	7.572444439	181.7387	8.078004837	8.477973938	0.034395184	27.6810532	664.3452759	24	19314.74854	
	17	497.4261	811.9562988	3.18484	15.28505	4.02723742	4.230072021	0.010446942	8.486763	203.6823	8.254636765	8.673844337	0.035189841	28.5720215	685.7285156	24	19486.95117	
	18	498.1678	813.1659312	3.175876	15.30084	4.17334509	4.395930767	0.010856563	8.831670761	211.9601	8.233650208	8.676088333	0.035198942	28.6226959	686.9447021	24	19516.00635	
	19	499.8296	815.880127	3.168243	15.31429	4.03582144	4.261843204	0.010525412	8.592227936	206.2135	8.488027573	8.965815544	0.036374383	29.6797791	712.3146973	24	19581.12305	
	20	500.5467	817.0505371	3.183505	15.28739	4.09973383	4.308595657	0.010640879	8.698624611	208.767	8.420138359	8.851631165	0.035911113	29.3426704	704.2241211	24	19609.21289	
	21	498.7445	814.1087036	3.187068	15.28112	4.1358242	4.340644836	0.010720026	8.73893261	209.7344	8.311076164	8.726390839	0.035403039	28.8278465	691.8682861	24	19538.60889	
	22	493.0634	804.835022	3.184205	15.28616	3.76542089	3.977269888	0.0098226	7.913868904	189.9328	8.305510521	8.72877121	0.03541268	28.5042629	684.1022949	24	19316.04053	
	23	489.4232	798.8931885	3.189675	15.27651	3.23978758	3.399244547	0.00839507	6.710642338	161.0554	8.479280472	8.896555901	0.036093395	28.8370342	692.0888062	24	19173.43652	
	24	486.9564	794.8661499	3.173332	15.30532	2.85838342	3.012203693	0.007439202	5.916830063	142.0039	8.575943947	9.043980598	0.036691487	29.1655922	699.9741821	24	19076.7876	
	25	490.734	801.0322266	3.190502	15.27506	3.0013113	3.145971298	0.007769563	6.229013443	149.4963	8.606310844	9.028004646	0.036626678	29.3372669	704.0944214	24	19224.77344	
	26	492.9124	804.5882568	3.188656	15.2783	3.31784844	3.480870008	0.008596655	6.91936591	166.0653	8.467197418	8.886730194	0.036053523	29.0088577	696.2125854	24	19310.11816	
	27	495.7945	809.2926025	3.174857	15.30262	3.43390846	3.618985891	0.008937757	7.23593998	173.6626	8.543034554	9.00514698	0.036533929	29.5665493	709.597229	24	19423.02246	
	28	493.8427	806.1085205	3.186114	15.28279	3.04455471	3.196466684	0.007894267	6.367889404	152.8293	8.576560048	9.008553505	0.036547758	29.4619827	707.0875854	24	19346.60449	
Mar03	01	493.4261	805.4268799	3.180263	15.2931	2.83819127	2.984941721	0.007371871	5.943510532	142.6443	8.629998207	9.081095695	0.036842078	29.6742039	712.1809082	24	19330.24512	

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	02	493.8217	806.0726929	3.167861	15.31496	3.25711536	3.43997407	0.008495654	6.852087498	164.4501	8.432221413	8.907464027	0.03613764	29.1300163	699.1204224	24	19345.74463	
	03	491.8651	802.8798828	3.152599	15.34187	3.0477345	3.2340734	0.007987146	6.418384075	154.0412	8.607582092	9.137225151	0.03706979	29.763895	714.3334961	24	19269.11719	
	04	493.2831	805.1938477	3.171104	15.30924	2.95663548	3.119829893	0.007705002	6.206341743	148.9522	8.687074661	9.16798687	0.037194595	29.9493713	718.7849121	24	19324.65234	
	05	494.5421	807.2474976	3.174412	15.30342	3.33501863	3.51490593	0.008680717	7.009994984	168.2399	8.494226456	8.953990936	0.036326393	29.3274784	703.8594971	24	19373.93994	
	06	490.3488	800.4043579	3.176193	15.30027	3.24694037	3.41955328	0.008445224	6.767475128	162.4194	8.336353302	8.783324242	0.035633996	28.5261421	684.6273804	24	19209.70459	
	07	489.3764	798.8170166	3.176637	15.2995	3.36904216	3.547414064	0.008760999	7.003561497	168.0855	8.31330204	8.757637024	0.035529777	28.3834496	681.2028198	24	19171.6084	
	08	11.14835	145.5810089	0.58659	4.190834	6.13553381	27.84033394	0.068756662	10.63213348	31.8964	1.845493317	3.668166876	0.014881734	6.04439974	18.13319969	2.25	327.5572701	
	09	377.1535	777.5980835	3.113953	15.135	4.66852379	6.338570595	0.015654286	9.55351162	181.5167	7.983099461	8.652179718	0.035101943	27.0473995	513.9005737	18.89722	14694.44401	
	10	489.3539	798.7810669	3.185032	15.2847	3.76856756	3.958124876	0.00977532	7.817561626	187.6215	8.045572281	8.453300476	0.034295112	27.3970871	657.5300903	24	19170.74561	
	11	484.7691	791.2966919	3.191519	15.27327	3.4224596	3.58694911	0.008858633	7.019834518	168.476	8.066399574	8.45776844	0.034313243	27.1582336	651.7976074	24	18991.12061	
	12	479.9648	783.4534302	3.186644	15.28187	3.3258512	3.49112916	0.008621989	6.761960983	162.2871	7.933223248	8.330781937	0.033798046	26.4841785	635.6203003	24	18802.88232	
	13	477.4345	779.3233032	3.186305	15.28245	3.13899112	3.295782566	0.008139549	6.349602222	152.3905	8.019340515	8.422330856	0.034169454	26.6343327	639.223999	24	18703.75928	
	14	479.3357	782.4265747	3.183251	15.28782	2.98731995	3.136067152	0.007745098	6.078571796	145.8857	8.152886391	8.571017265	0.034772675	27.2086048	653.0064697	24	18778.23779	
	15	480.3348	784.0588989	3.201502	15.25567	2.86903405	2.998731613	0.007405926	5.809252262	139.422	8.29597187	8.672046661	0.035182547	27.5698209	662.1557007	24	18817.41357	
	16	488.6976	797.7092285	3.210724	15.2394	3.01625586	3.142462969	0.007760895	6.193722248	148.6493	8.753529549	9.123767853	0.037015196	29.528492	708.6837769	24	19145.02148	
	17	493.25	805.1400146	3.189674	15.27651	3.35298419	3.517060518	0.008686036	6.994822025	167.8757	8.659888268	9.085555077	0.036860164	29.679388	712.3052979	24	19323.36035	
	18	493.9177	806.2296753	3.188975	15.27775	3.56824994	3.742331743	0.009242386	7.456923962	178.9662	8.568313599	8.991765022	0.036479656	29.4122467	705.8939209	24	19349.51221	
	19	491.1266	801.673645	3.181787	15.2904	3.55537128	3.737215519	0.009229754	7.408361912	177.8007	8.463858604	8.901835442	0.036114808	28.9552002	694.9248047	24	19240.16748	
	20	490.0493	799.9155273	3.182488	15.28918	3.51769209	3.698192596	0.009133377	7.308364391	175.4008	8.321250916	8.749966621	0.035498668	28.3979301	681.550293	24	19197.97266	
	21	489.6644	799.2878418	3.188784	15.27808	3.77445292	3.959656239	0.00977911	7.823800564	187.7712	8.181026459	8.585408211	0.034831062	27.84412	668.2589111	24	19182.9082	
	22	482.9205	788.2786865	3.18624	15.28255	3.46681738	3.639839649	0.008989262	7.092465878	170.2192	8.112822533	8.520666122	0.034568392	27.2560291	654.1447144	24	18918.68848	
	23	484.6865	791.1621094	3.188911	15.27787	3.52611828	3.699536324	0.009136694	7.233582497	173.606	8.07514286	8.474127769	0.034379594	27.2023544	652.8565063	24	18987.89063	
	24	485.6897	792.7988892	3.196033	15.26531	3.59813929	3.76661706	0.00930236	7.378977299	177.0955	8.109483719	8.491220474	0.034448937	27.311779	655.4827271	24	19027.17334	
	25	484.9916	791.6599121	3.188465	15.27864	3.9569826	4.160899162	0.010276104	8.142836571	195.4281	7.9675107	8.362107277	0.033925138	26.8588409	644.6121826	24	18999.83789	
	26	482.3654	787.3728027	3.166271	15.31777	3.87397575	4.091469765	0.010104648	7.966769695	191.2025	7.861626625	8.308637619	0.033708204	26.5504131	637.2098999	24	18896.94727	
	27	489.4069	798.8661499	3.16888	15.31317	3.32500076	3.5122962	0.00867427	6.939419746	166.5461	8.456706047	8.93096447	0.036232974	28.9480324	694.7528076	24	19172.7876	
	28	484.5904	791.005127	3.1919	15.27259	3.0497992	3.195982933	0.007893075	6.248073678	149.9538	8.441919327	8.851096153	0.035908952	28.4068546	681.7645264	24	18984.12305	
	29	482.8302	788.1306152	3.18166	15.29062	3.18700457	3.349976301	0.008273388	6.529514313	156.7083	8.312507629	8.742847443	0.035469797	27.9603291	671.0479126	24	18915.13477	
	30	479.8548	783.274231	3.179563	15.29434	3.12436414	3.285794973	0.008114882	6.370098114	152.8824	8.183888435	8.612709999	0.034941822	27.3776875	657.0645142	24	18798.58154	
	31	471.9479	770.368103	3.168435	15.31395	2.71736407	2.868516207	0.007084334	5.476282597	131.4308	8.171965599	8.631315231	0.0350173	26.9817715	647.5625	24	18488.83447	
Apr03	01	476.5691	777.9107666	3.176192	15.30027	2.46823549	2.598323822	0.006417047	5.001983165	120.0476	8.572606087	9.032638821	0.036646284	28.5060463	684.1450806	24	18669.8584	
	02	489.6432	799.2519531	3.166317	15.31769	2.95965672	3.126913786	0.007722497	6.172114372	129.6144	8.751961708	9.251454353	0.037533209	29.9676094	629.3198242	24	19182.04688	
	03	492.9341	804.6240845	3.156989	15.33413	3.39130044	3.591720819	0.008870422	7.147434235	171.5384	8.726978302	9.25133419	0.037532728	30.1984043	724.7617188	24	19310.97803	
	04	493.2225	805.0950317	3.162392	15.3246	3.23056626	3.416847467	0.00843854	6.803204536	163.2769	8.763545036	9.273565292	0.037622921	30.2932949	727.0391235	24	19322.28076	
	05	495.401	808.6511841	3.156797	15.33447	3.43724537	3.64142251	0.008993176	7.280986309	174.7437	8.660682678	9.181181908	0.037248123	30.1205082	722.8922119	24	19407.62842	
	06	470.4703	801.3447876	3.150912	15.34483	3.3411653	3.544177055	0.008752994	7.031173706	161.717	8.591468811	9.124923706	0.037019875	29.6661949	682.3225098	24	19232.2749	
	07	487.3129	795.4490967	3.169004	15.31293	3.24121881	3.422068357	0.008451432	6.731145382	161.5475	8.262425423	8.725921631	0.035401125	28.1677628	676.0263062	24	19090.77832	
	08	480.747	784.7315063	3.171487	15.30857	2.98620677	3.147254944	0.007772733	6.120193005	146.8846	8.104077339	8.551206589	0.034692295	27.2258949	653.4215088	24	18833.55615	
	09	478.0636	780.3503418	3.213882	15.23382	2.73273206	2.847579956	0.00703263	5.497711658	131.9451	7.640108109	7.961900234	0.032301489	25.2316418	605.5593872	24	18728.4082	
	10	478.9398	781.7807617	3.26287	15.14745	2.99097705	3.06693697	0.007574371	5.925159454	142.2038	7.31137991	7.49882412	0.030422783	23.787508	570.9002075	24	18762.73828	
	11	481.7063	786.2965698	3.26179	15.14936	3.24217176	3.32394886	0.008209112	6.461840153	155.0842	7.31789875	7.508159161	0.030460654	23.9531536	574.8756714	24	18871.11768	
	12	480.8712	784.9332886	3.303719	15.07546	2.40262747	2.444508791	0.006037173	4.758455276	114.2029	7.923100471	8.025108337	0.032557912	25.5552082	613.3250122	24	18838.39893	
	13	482.2803	787.2338257	3.384525	14.933	2.18937421	2.163740873	0.00534376	4.209238052	101.0217	8.019975662	7.93062973	0.032174621	25.3297577	607.9141846	24	18893.61182	
	14	487.1952	795.2563477	3.3147	15.05609	2.49695659	2.524189949	0.006233957	4.957030773	118.9687	8.367728233	8.452571869	0.034292154	27.2701206	654.4829102	24	19086.15234	
	15	490.0717	799.9514771	3.258229	15.15565	2.96029329	3.040450811	0.007508958	6.008149147	144.1956	8.188975334	8.411047935	0.034123693	27.2995663	655.1895752	24	19198.83545	
	16	488.6042	797.5568237	3.246557	15.17623	3.05167294	3.145212173	0.007767688	6.200557232	142.6128	8.266921043	8.521585464	0.034572143	27.5686607	634.0792236	24	19141.36377	
	17	487.8823	796.3774414	3.260794	15.15111	3.25028086	3.334873199	0.008236093	6.561056137	157.4653	8.110173225	8.323472977	0.033768378	26.8922157	645.413208	24	19113.05859	
	18	489.6733	799.3012085	3.253904	15.16327	3.3097403	3.403204203	0.008404846	6.719760895	161.2743	8.122680664	8.354005814	0.033892263	27.0907173	650.1771851	24	19183.229	
	19	484.9477	791.5880127	3.260645	15.15139	2.99701786	3.074897528	0.007594031	6.016412735	144.3939	8.04477787	8.256628036	0.033497192	26.5179996	636.4320068	24	18998.1123	
	20	479.9637	783.4534302	3.257211	15.15744	2.60496163	2.674848318	0.006606037	5.182784557	124.3868	8.077687263	8.298961639	0.033668958	26.3793831	633.1052246	24	18802.88232	
	21	485.2964	792.1575317	3.265032	15.14365	2.55758405	2.620537519	0.006471904	5.129905224	123.1177	8.403445244	8.613509178	0.034945082	27.6840076	664.4161987	24	19011.78076	
	22	491.8759	802.8977661	3.263699	15.14601	3.13867259	3.216636658	0.007944082	6.383345604	153.2003	8.486911774	8.702219963	0.035304949	28.3465424	680.3170166	24	19269.54639	
	23	485.42	792.359436	3.245893	15.1774	2.94836879	3.038763285	0.007504791	5.948021412	142.7525	8.257657051	8.513280869	0.03453844	27.3672867	656.8148804	24	19016.62646	
	24	484.4806	790.8256836	3.250724	15.16886	3.0052855	3.092545033	0.007637616	6.047739506	145.1458	8.101534843	8.341034889	0.033839628	26.7685337	642.4448242	24	18979.81641	
	25	486.2495	793.7138062	3.251297	15.16787	2.89510965	2.978825092	0.007356764	5.84312582	140.235	8.19438076	8.434490204	0.034218784	27.1599827	651.8395996	24	19049.13135	
	26	7.401078	96.6473999	0.670533	9.267834	56.3708572	183.5942078	0.453420013	39.79786682	119.3936	1.453753352	3.576740026	0.014510867	3.05569649	9.167089462	2.244444	216.9196665	
	27	485.9092	793.1575317	3.236733	15.19354	3.52739048	3.797302961	0.009378137	7.078802109	169.8913	8.651936531	9.10896492	0.036955129	28.661129	687.8671265	24	19035.78076	
	28	491.1214	801.6644897	3.262553	15.14803	3.40067959	3.486666203	0.008610972	6.907983303	165.7916	8.346529007	8.562115669	0.03473657	27.8471794	668.3322754	24	19239.94775	
	29	492.0741	803.2207031	3.252822	15.16518	3.30719662	3.40164423	0.008400992	6.752142429	162.0514	8.539536476	8.785605431	0.035643276	28.6281376	687.0753174	24	19277.29688	
	30	492.0442	803.1713257	3.240866	15.18624	3.35997963	3.466467142	0.008561086	6.884412289	165.2259	8.496769905	8.773647308	0.035594758	28.5893288	686.1439209	24	19276.11182	
May03	01	487.7942	796.2338257	3.250789	15.16877	3.05425334	3.144589663	0.007766153	6.189330101	148.5439	8.426179886	8.674860001	0.03519398	28.0252285	672.6055298	24	19109.61182	
	02	487.7941	796.2338257	3.272027	15.13132	3.0089426	3.076823711	0.007598791	6.050608158	145.2146	8.41775322	8.610030174	0.034930967	27.8161335	667.5872192	24	19109.61182	

Unit 1 - CEMS Data

	03	484.4174	790.7226563	3.284174	15.1099	3.00957918	3.065729618	0.007571389	5.989844322	143.7563	8.31043911	8.468539238	0.034356933	27.167429	652.0183105	24	18977.34375	
	04	489.0605	798.3011475	3.275208	15.12572	3.57238173	3.648930788	0.009011716	7.19645977	172.715	8.223633766	8.403026581	0.03409113	27.2144413	653.1466064	24	19159.22754	
	05	485.8374	793.0410767	3.272282	15.13087	2.63707709	2.695904255	0.00665804	5.284172058	126.8201	8.470060349	8.662184715	0.035142548	27.8716049	668.9185181	24	19032.98584	
	06	482.731	787.9692993	3.270883	15.13334	2.37395835	2.427419186	0.005994963	4.729242325	113.5018	8.553845406	8.752232552	0.035507862	27.9794426	671.5065918	24	18911.26318	
	07	483.0687	788.520813	3.250787	15.16877	2.39107418	2.460453033	0.006076548	4.793624878	115.047	8.589776039	8.842445374	0.035873864	28.28792	678.9100952	24	18924.49951	
	08	488.4071	797.2340088	3.245064	15.17884	2.51831508	2.59608674	0.006411521	5.113736629	122.7297	8.80488205	9.080548286	0.036839847	29.3719082	704.9257813	24	19133.61621	
	09	490.316	800.350647	3.253332	15.16428	2.7550447	2.833709478	0.006998374	5.603521347	134.4845	8.703289986	8.953607559	0.036324844	29.0765343	697.836792	24	19208.41553	
	10	486.2444	793.7047119	3.258418	15.15532	2.71704626	2.789363861	0.006888854	5.474599838	131.3904	8.4745121	8.703344345	0.035309535	28.0296288	672.7111206	24	19048.91309	
	11	479.9725	783.46698	3.261281	15.15026	2.3952601	2.456711531	0.006067309	4.759749889	114.234	8.313937187	8.530685425	0.034609046	27.1216507	650.9196167	24	18803.20752	
	12	473.6844	773.2021484	3.261981	15.14903	2.28397179	2.342056274	0.005784146	4.479771614	107.5145	8.242712975	8.456140518	0.034306612	26.5317783	636.7626953	24	18556.85156	
	13	469.8217	766.8972168	3.272982	15.12962	2.13198256	2.179168224	0.005381859	4.133151531	99.19564	8.142711639	8.325501442	0.033776619	25.9079742	621.7913818	24	18405.5332	
	14	474.8159	775.0497437	3.218207	15.2262	2.06012034	2.141365051	0.0052885	4.102108955	98.45062	8.388341904	8.72232151	0.035386514	27.4287796	658.2907104	24	18601.19385	
	15	473.5139	772.9241333	3.233681	15.19893	2.3354826	2.417874098	0.00597139	4.621873379	110.925	8.174509048	8.461752892	0.034329388	26.5443916	637.0654297	24	18550.1792	
	16	475.0771	775.475769	3.25384	15.16337	2.40209699	2.469058752	0.006097804	4.734387875	113.6253	8.144618988	8.376038551	0.033981636	26.3573036	632.5753174	24	18611.41846	
	17	471.5858	769.776062	3.255175	15.16103	2.21099663	2.272752523	0.005612987	4.322846889	103.7483	8.192631721	8.423016548	0.034172237	26.307045	631.3690796	24	18474.62549	
	18	476.7055	778.1351929	3.246527	15.17628	2.31258869	2.382936716	0.005885107	4.582410812	109.9779	8.386592865	8.644576073	0.035071108	27.2918282	655.0039063	24	18675.24463	
	19	474.1153	773.906311	3.239595	15.1885	2.33961535	2.415576696	0.005965716	4.623262882	110.9583	8.250980377	8.522411346	0.034575488	26.7691383	642.4592896	24	18573.75146	
	20	467.572	763.2244873	3.240549	15.18682	2.23961329	2.311843634	0.005709529	4.363663197	104.7279	8.000738144	8.261879921	0.033518512	25.5901756	614.1641846	24	18317.3877	
	21	462.9423	755.6682739	3.198692	15.26061	2.18652081	2.285829067	0.005645281	4.268753052	98.18132	7.846425533	8.206944466	0.033295631	25.1537609	578.536499	24	18136.03857	
	22	458.3543	748.1793213	3.230692	15.20419	2.23913836	2.319497108	0.00572843	4.292776108	103.0266	7.73205471	8.009994507	0.032496598	24.3251705	583.8040771	24	17956.30371	
	23	456.4615	745.0895996	3.245892	15.1774	2.23564005	2.303461552	0.005688824	4.243189335	101.8365	7.730305195	7.969881058	0.032333851	24.09478	578.2747192	24	17882.15039	
	24	463.874	757.1884766	3.258864	15.15454	2.35074449	2.41321373	0.005959881	4.514696598	108.3527	7.992789745	8.208211899	0.033300772	25.2189865	605.2556763	24	18172.52344	
	25	473.9123	773.5743408	3.27788	15.12099	2.76728463	2.824265003	0.006975045	5.398953915	129.5749	8.12522316	8.295354843	0.033654325	26.0354214	624.8500977	24	18565.78418	
	26	470.5933	768.1572266	3.285002	15.10845	2.93533373	2.989631653	0.00738345	5.67441082	136.1859	7.743024826	7.887775421	0.032000773	24.5863171	590.0715942	24	18435.77344	
	27	466.4176	761.3410645	3.266814	15.14052	2.90687466	2.97693491	0.007352096	5.601016998	134.4244	7.619652271	7.804528236	0.031663012	24.1214962	578.9158936	24	18272.18555	
	28	458.4229	748.2914429	3.24481	15.17933	2.67076874	2.755442381	0.006805081	5.089549541	111.9701	7.723178387	7.961174965	0.032298543	24.1559048	531.4299316	24	17958.99463	
	29	460.3165	751.3811035	3.239214	15.18916	2.63564587	2.723104239	0.006725213	5.055459023	121.331	7.751609802	8.009635925	0.032495163	24.4232159	586.1572266	24	18033.14648	
	30	468.9421	765.4621582	3.278578	15.11977	2.81180167	2.86929822	0.007086265	5.429003716	130.2961	7.903757572	8.067213058	0.032728754	25.063921	601.5341187	24	18371.0918	
	31	465.5659	759.9509277	3.274254	15.1274	2.89065695	2.953097582	0.007293222	5.546582699	133.118	7.63380146	7.802170277	0.031653453	24.0572414	577.3737793	24	18238.82227	
Jun03	01	461.9482	754.0449219	3.26942	15.13592	2.83533049	2.900849104	0.007164191	5.406494141	129.7559	7.696125507	7.877635479	0.031959616	24.1020298	578.4487305	24	18097.07813	
	02	458.7834	748.8790283	3.266115	15.14174	2.97873449	3.051079512	0.007535209	5.646365643	135.5128	7.61265707	7.800098896	0.031645045	23.7028999	568.8696289	24	17973.09668	
	03	459.2747	749.6817627	3.294731	15.0913	2.65090871	2.69805336	0.006663348	4.99290514	119.8297	8.171806335	8.29140377	0.033638276	25.2306709	605.5361328	24	17992.3623	
	04	461.3951	753.1435547	3.289581	15.10037	2.71466136	2.76531291	0.006829457	5.140264034	123.3663	8.116797447	8.250482559	0.033472266	25.2240162	605.3764038	24	18075.44531	
	05	457.866	747.3811035	3.285956	15.10677	2.75917792	2.812184095	0.006945211	5.190775394	124.5786	7.732689381	7.870319366	0.031929951	23.875658	573.0158081	24	17937.14648	
	06	461.2883	752.9686279	3.280677	15.11607	3.14853048	3.210836172	0.007929757	5.968801975	143.2513	7.533163548	7.684129238	0.031174563	23.4798584	563.5166016	24	18071.24707	
	07	298.8136	650.223877	2.832892	13.58331	3.4717977	5.768866062	0.014247305	6.379286289	114.8271	7.028599262	7.773623466	0.031537645	21.8577099	393.4387817	17.41667	11324.73335	
	08	462.0089	754.1435547	3.279405	15.11833	3.12293291	3.186101675	0.00786867	5.935278416	142.4467	7.450332165	7.602703094	0.030844221	23.2640629	558.3375244	24	18099.44531	
	09	468.3162	764.4396362	3.302553	15.07751	2.90305662	2.94838953	0.007281594	5.55929184	133.423	8.279755592	8.380813599	0.034001041	26.013834	624.3319702	24	18346.55127	
	10	477.7934	779.9107056	3.29969	15.08256	3.43295383	3.479502201	0.008593279	6.703707695	160.889	8.003440857	8.118444443	0.032936588	25.6943207	616.6636963	24	18717.85693	
	11	479.9095	783.3636306	3.23667	15.19366	3.59039187	3.711834192	0.009167066	7.178049088	157.9171	8.000506401	8.27130127	0.033556741	26.2728367	578.0023804	24	18800.73193	
	12	480.4806	784.2966309	3.301911	15.07864	2.64598751	2.724100351	0.006727671	5.261548996	110.4925	8.833666801	8.925165176	0.036209449	28.449091	597.4309082	24	18823.11914	
	13	476.8049	778.2966919	3.281632	15.11439	3.55600762	3.624850035	0.008952242	6.970901012	167.3016	7.850495815	8.006991386	0.032484416	25.2856579	606.8557739	24	18679.12061	
	14	474.4919	774.520752	3.299946	15.0821	3.62389326	3.674285412	0.009074332	7.030783653	168.7388	7.701369286	7.809986591	0.031685166	24.5443039	589.0632935	24	18588.49805	
	15	474.9836	775.3233032	3.281377	15.11484	3.7914629	3.865159273	0.009545731	7.403841019	177.6922	7.785473824	7.940562248	0.03221491	24.979166	599.5	24	18607.75928	
	16	470.2748	767.6372681	3.292061	15.096	3.84376955	3.906453371	0.009647716	7.409385204	177.8253	7.597552299	7.725880623	0.031343944	24.0744743	577.7874146	24	18423.29443	
	17	465.2526	759.4398193	3.30675	15.0701	3.85012746	3.898508787	0.009628096	7.310050964	175.4412	7.476882458	7.563491821	0.030685145	23.3145008	559.5479736	24	18226.55566	
	18	468.3956	764.5698242	3.267771	15.13882	3.5518539	3.639618158	0.008988718	6.869203091	157.9917	7.939161301	8.128559113	0.032977626	25.2219296	580.1043701	24	18349.67578	
	19	474.3709	774.3233643	3.262172	15.14869	3.45854998	3.547937155	0.008762287	6.788365364	162.9208	8.124746323	8.336448669	0.033821028	26.1905994	628.5744019	24	18583.76074	
	20	478.2803	780.7047119	3.294796	15.09117	3.5851016	3.640054941	0.008989794	7.021129131	168.5071	8.184524536	8.313767433	0.033729009	26.3399372	632.1585083	24	18736.91309	
	21	478.5743	781.1846313	3.290343	15.09901	3.68112803	3.742107391	0.009241832	7.224019051	173.3765	8.171328545	8.310943604	0.033717558	26.3417759	632.2025757	24	18748.43115	
	22	476.5824	777.9331665	3.284175	15.1099	3.58780408	3.655949116	0.00902905	7.025026321	168.6006	8.069896698	8.223444939	0.033362579	25.9587116	623.0090942	24	18670.396	
	23	478.5577	781.1575928	3.286147	15.10642	3.41562366	3.477221966	0.008587646	6.715063095	161.1615	8.350026131	8.50374794	0.034499764	26.95047	646.8112793	24	18747.78223	
	24	478.5797	781.1934204	3.304462	15.07413	3.31975698	3.360081196	0.008298351	6.484145641	155.6195	8.292474747	8.400653839	0.034081519	26.6390991	639.3383789	24	18748.64209	
	25	471.7472	770.0407715	3.309995	15.06437	3.64281201	3.682357788	0.009094262	7.003526688	168.0846	7.819177628	7.905143261	0.032071222	24.700079	592.8018799	24	18480.97852	
	26	466.6431	761.7088013	3.305162	15.0729	3.75426126	3.802703381	0.009391483	7.159869671	171.8369	7.657648563	7.75402689	0.031458151	23.9674034	575.2177124	24	18281.01123	
	27	465.7772	760.2962036	3.314892	15.05575	3.68017411	3.718302488	0.009183039	6.977206707	167.453	7.840799332	7.91208601	0.032099392	24.4212418	586.1098022	24	18247.10889	
	28	463.2806	756.2199707	3.277117	15.12235	3.76046157	3.840025425	0.009483659	7.172436714	172.1385	7.51424551	7.673142433	0.031129988	23.5443211	565.0637207	24	18149.2793	
	29	466.8489	762.0450439	3.288881	15.1016	3.9378891	4.006245613	0.009894172	7.542702675	181.0249	7.710272789	7.846287727	0.031832442	24.2587585	582.2102051	24	18289.08105	
	30	470.5776	768.1304321	3.313874	15.05755	4.07843065	4.117159843	0.010168095	7.814644814	187.5515	7.781020641	7.858052254	0.031880178	24.4896297	587.7510986	24	18435.13037	
Jul03	01	473.522	772.9378052	3.304207	15.07459	4.693223	4.750644684	0.011732602	9.069876671	217.677	7.767984867	7.86862278	0.031923056	24.6807995	592.3391724	24	18550.50732	
	02	470.3823	767.8121948	3.295304	15.09027	4.68734121	4.758934498	0.011753077	9.035106659	216.8426	7.638093948	7.756874561	0.031469692	24.1665077	579.9962158	24	18427.49268	
	03	469.8021	766.8657837	3.295368	15.09017	4.66079044	4.731398106	0.011685084	8.964479446	215.1475	7.595645905	7.71445179	0.031297583	24.0061836	576.1483765	24	18404.77881	

Unit 1 - CEMS Data

	04	468.5166	764.7671509	3.302936	15.07684	4.11849356	4.172616005	0.010305052	7.885375023	189.249	7.651130676	7.752249718	0.031450946	24.0544872	577.3076782	24	18354.41162
	05	364.8963	680.647644	2.938301	13.64628	3.37822413	3.48519659	0.008607341	6.428224087	134.9927	8.057091713	8.679925919	0.035214495	24.8910332	522.7116699	20.43333	13907.89959
	06	472.0275	770.49823	3.305036	15.07313	3.32659221	3.367968321	0.008317823	6.41238308	153.8972	7.992469788	8.093625069	0.032835882	25.3038673	607.2927856	24	18491.95752
	07	472.6098	771.4487915	3.315209	15.05519	3.93248343	3.966939926	0.009797101	7.562216282	181.4932	7.589921951	7.662412167	0.031086462	23.9830666	575.5936279	24	18514.771
	08	478.0903	780.3952637	3.30459	15.07392	4.38224936	4.436771393	0.01095743	8.557125092	205.371	7.729510307	7.827918053	0.031757914	24.7669244	594.8862305	24	18729.48633
	09	472.9612	772.0229492	3.289073	15.10127	4.44072819	4.51736021	0.01115647	8.613684654	198.1147	7.464035034	7.594089508	0.03080928	23.780592	546.9536133	24	18528.55078
	10	469.9231	767.0632324	3.305989	15.07145	4.5437789	4.597844124	0.011355241	8.714592934	209.1502	7.280378819	7.370752335	0.0299032	22.9398041	550.5552979	24	18409.51758
	11	468.9261	765.4353027	3.322269	15.04275	4.11849356	4.148514748	0.010245529	7.84981823	188.3956	7.360029697	7.414045811	0.030078828	23.0269871	552.6477051	24	18370.44727
	12	467.4124	762.9644165	3.327418	15.03366	4.06491613	4.086706638	0.010092882	7.702685833	184.8645	7.253191948	7.295320034	0.02959718	22.5838089	542.0114136	24	18311.146
	13	467.8654	763.7043457	3.32106	15.04468	4.17270851	4.203118324	0.010380385	7.931421757	190.3541	7.229504108	7.284861565	0.029554745	22.5717659	541.7224121	24	18328.9043
	14	464.879	758.829895	3.319725	15.04723	4.04393101	4.075493813	0.010065192	7.640166283	183.364	7.239837646	7.299418449	0.02961378	22.4788132	539.4915161	24	18211.91748
	15	463.8355	757.1258545	3.340075	15.01136	3.55378079	3.573870897	0.008826342	6.670620441	160.0949	7.750337124	7.753597736	0.0314564	23.8382835	572.1187744	24	18171.02051
	16	462.4234	754.8208008	3.315399	15.05486	4.18018007	4.222711086	0.010428763	7.868436813	188.8425	7.294053555	7.358521938	0.029853575	22.5445251	541.0686035	24	18115.69922
	17	462.009	754.1436768	3.334669	15.02088	4.24758959	4.27739048	0.010563816	7.945799351	190.6992	7.544133186	7.560076237	0.030671274	23.1548843	555.7172241	24	18099.44824
	18	462.6039	755.1167603	3.329455	15.03008	4.29989672	4.333069801	0.010701317	8.059822083	193.4357	7.542543888	7.57171154	0.030718496	23.2228413	557.3482056	24	18122.80225
	19	461.7362	753.6997681	3.278579	15.11976	4.38558769	4.475194931	0.011052336	8.33097744	199.9435	7.093254089	7.241191864	0.029377563	22.1457577	531.49823	24	18088.79443
	20	461.8236	753.8430786	3.281697	15.11427	4.548388	4.637259007	0.011452584	8.6340065	207.2162	7.097865582	7.237577915	0.029362908	22.1394882	531.3477173	24	18092.23389
	21	461.8931	753.9552612	3.286719	15.10542	4.25045204	4.331628799	0.010697769	8.060199738	193.4448	7.352558136	7.481807709	0.030353749	22.9034252	549.6821899	24	18094.92627
	22	460.1208	751.0629883	3.292062	15.096	4.23518848	4.309827805	0.010643927	7.976272583	191.4305	7.352398872	7.469596863	0.030304216	22.788929	546.9343262	24	18025.51172
	23	460.8877	752.3139648	3.27595	15.1244	4.31775427	4.413182735	0.010899176	8.184027672	196.4167	7.397073746	7.553421497	0.030644296	23.0800076	553.920166	24	18055.53516
	24	461.5304	753.3632813	3.305161	15.0729	3.91229177	3.973586321	0.009813506	7.384560108	177.2294	7.623785973	7.709693909	0.031278294	23.5796623	565.9119263	24	18080.71875
	25	464.2996	757.883667	3.326147	15.0359	3.82071757	3.854589939	0.009519629	7.205517769	172.9324	7.820130348	7.85909605	0.031884406	24.1799583	580.3189697	24	18189.20801
	26	460.8324	752.2243652	3.310504	15.0635	4.84537125	4.898350239	0.012097379	9.095544815	218.2931	6.986417294	7.062203407	0.028651409	21.5714703	517.715332	24	18053.38477
	27	457.8516	747.3587646	3.293078	15.0942	5.10690069	5.186421394	0.012808833	9.577450752	229.8588	6.774013042	6.885732174	0.027935462	20.877346	501.0563049	24	17936.61035
	28	460.7174	752.0360107	3.302745	15.07717	4.33773565	4.402705669	0.010873305	8.163502693	195.9241	7.374656677	7.466046333	0.030289808	22.8001289	547.203125	24	18048.86426
	29	459.137	749.4573975	3.2892	15.10104	4.74568844	4.835556507	0.011942307	8.936741829	214.4818	7.189757347	7.311561108	0.029663047	22.2487717	533.97052	24	17986.97754
	30	460.3489	751.4350586	3.315782	15.05418	5.71374273	5.779728413	0.01427411	10.69876385	256.7703	6.922187328	6.979286671	0.028315021	21.3026581	511.2637939	24	18034.44141
	31	461.9092	753.9821167	3.298674	15.08433	6.48831749	6.579104424	0.016248338	12.25234127	294.0562	6.645394802	6.743277073	0.02735753	20.6346283	495.2311096	24	18095.5708
Aug03	01	461.9288	754.0135498	3.337595	15.01573	5.62773418	5.663029671	0.013985906	10.52370167	252.5688	6.956686497	6.965445518	0.028258858	21.3287964	511.8911133	24	18096.3252
	02	278.0816	640.8156738	2.847149	13.31912	8.81754494	12.98725986	0.032074526	11.50659466	195.6121	7.010883331	7.493682861	0.030401917	20.7849884	353.3447876	16.26944	10425.71441
	03	465.4996	759.8432617	3.3278	15.033	4.60721302	4.629865646	0.011434311	8.692564964	208.6216	6.865746498	6.904810905	0.028012875	21.2875423	510.901001	24	18236.23828
	04	466.8052	761.9733276	3.326084	15.03602	3.97556782	3.999341726	0.009877113	7.528648376	180.6876	7.21567297	7.261416912	0.029459612	22.4574795	538.9794922	24	18287.35986
	05	470.0086	767.2020874	3.321378	15.04432	4.00450325	4.032783985	0.00995971	7.644971848	183.4793	7.323463917	7.380727291	0.029943662	22.9805031	551.5321045	24	18412.8501
	06	470.5304	768.0542603	3.325067	15.03782	3.69050789	3.721362829	0.009190594	7.052993774	169.2719	7.588808537	7.630017281	0.030955037	23.7916088	570.9985962	24	18433.30225
	07	468.1074	764.098999	3.319597	15.04745	3.99082994	4.021904945	0.009932841	7.596101284	182.3064	7.234591484	7.294481277	0.029593751	22.6175919	542.8222046	24	18338.37598
	08	469.0081	765.5698242	3.327609	15.03333	3.91753793	3.94228363	0.009736203	7.452171803	178.8521	7.401843071	7.440508842	0.030186187	23.1210365	554.9049072	24	18373.67578
	09	465.2033	759.3588867	3.315273	15.05508	4.17684221	4.214342594	0.010408103	7.907526016	189.7806	7.036973476	7.103814125	0.02882022	21.8894501	525.3468018	24	18224.61328
	10	464.5579	758.3051758	3.315527	15.05462	4.20100784	4.239019394	0.010469052	7.939066887	190.5376	7.039835453	7.105727196	0.028827978	21.8645496	524.7492065	24	18199.32422
	11	469.2616	765.9825439	3.297021	15.08725	4.79847145	4.869086266	0.012025117	9.214917183	221.158	7.094843864	7.201597691	0.029216941	22.3805618	537.1334839	24	18383.58105
	12	469.7802	766.8300171	3.324302	15.03915	3.62150955	3.659845352	0.009038669	6.925543308	166.213	7.830624104	7.873221397	0.031941727	24.5095177	588.2283936	24	18403.92041
	13	466.2967	761.1437378	3.30637	15.07077	4.10672951	4.155299187	0.010262287	7.812527657	187.5007	7.311222076	7.40010643	0.030022291	22.8531342	548.4752197	24	18267.44971
	14	464.3484	757.9644165	3.295114	15.09061	4.3564949	4.423665524	0.010925067	8.282491684	198.7798	7.163364887	7.275515079	0.029516809	22.3763218	537.0316772	24	18191.146
	15	467.7086	763.4486084	3.315146	15.05529	3.98542404	4.027733326	0.009947236	7.589922428	182.1581	7.613610268	7.681331158	0.031163208	23.8016968	571.2407227	24	18322.7666
	16	465.044	759.098877	3.26675	15.14063	4.14567995	4.246716499	0.010488058	7.962600231	191.1024	7.290235519	7.466873169	0.030293163	23.0009327	552.0223999	24	18218.37305
	17	464.2171	757.7491455	3.280995	15.1155	4.0000515	4.07858181	0.01007282	7.636242867	183.2698	7.413926125	7.562496662	0.0306811	23.2498169	557.9956055	24	18185.97949
	18	462.162	754.3947754	3.277816	15.12111	3.98860407	4.071503162	0.010055334	7.588041782	182.113	7.382445812	7.536752701	0.030576654	23.0723381	553.736084	24	18105.47461
	19	463.6157	756.7670288	3.306115	15.07123	3.5682478	3.615785837	0.00892986	6.750701904	162.0168	7.755743504	7.846305847	0.031832512	24.1049824	578.5195923	24	18162.40869
	20	463.8931	757.2200317	3.301092	15.08009	3.30518293	3.353642941	0.008282447	6.269677639	150.4723	7.956593037	8.063246727	0.032712657	24.7741699	594.5800781	24	18173.28076
	21	466.1292	760.8702393	3.356734	14.98198	2.47491217	2.483811617	0.006134239	4.651433945	111.6344	8.648599625	8.608546257	0.034924943	26.5996876	638.3925171	24	18260.88574
	22	465.0113	759.045105	3.350186	14.99353	3.51546574	3.524439573	0.008704259	6.600004673	158.4001	7.677045345	7.659015656	0.031072674	23.6032124	566.4771118	24	18217.08252
	23	461.0938	752.6502686	3.333142	15.02357	4.09369326	4.109211445	0.010148458	7.640585423	183.3741	6.993412971	7.022408962	0.028489958	21.4474297	514.7382813	24	18063.60645
	24	458.6926	748.7310181	3.33575	15.01897	4.44457293	4.456718922	0.0110067	8.24581337	197.8995	6.798336506	6.820785999	0.027671967	20.7221584	497.3317871	24	17959.54443
	25	459.3105	749.7399292	3.337467	15.01595	3.88907886	3.907395124	0.009650043	7.222014427	173.3283	7.259392262	7.272574425	0.029504891	22.1414909	531.395813	24	17993.7583
	26	459.3735	749.8431396	3.248672	15.17249	4.02161455	4.152746201	0.010255973	7.673792839	168.8234	7.302015781	7.524085522	0.030525263	22.926878	504.3912964	24	17996.23535
	27	462.0112	754.1480103	3.257975	15.15609	5.17876244	5.32339716	0.013147122	9.910595894	237.8543	6.926160812	7.112839222	0.028856838	21.7737122	522.5690918	24	18099.55225
	28	465.9149	760.5204468	3.28691	15.10508	5.28893852	5.382450581	0.013292963	10.11664963	242.7996	7.030454636	7.15827179	0.029041158	22.0865955	530.0763081	24	18252.49072
	29	468.3987	764.5742798	3.297021	15.08726	5.16429424	5.239715099	0.01294045	9.900104523	237.6025	7.191187382	7.29938221	0.029613649	22.6417084	543.401001	24	18349.78271
	30	359.2666	670.079834	2.906492	14.03411	7.15865993	10.3292284	0.025509952	12.38116455	260.0045	7.2916646	7.882723331	0.031980276	22.5181618	472.8814087	20.225	13552.3649
	31	466.4478	761.3903809	3.292444	15.09533	4.48447704	4.557304859	0.0112551	8.572810173	205.7475	7.220759869	7.339346886	0.02977578	22.6741619	544.1799316	24	18273.36914
Sep03	01	464.9398	758.9285278	3.290408	15.09892	4.46603441	4.54092741	0.011214659	8.515420914	204.3701	7.18037653	7.302911282	0.029627966	22.4883842	539.7211914	24	18214.28467
	02	464.3107	757.9016113	3.313237	15.05867	3.79178166	3.838731766	0.009480463	7.173766136	172.1704	7.619175434	7.687089443	0.031186579	23.6587448	567.8098755	24	18189.63867
	03	460.9913	752.484436	3.311331	15.06203	3.91292667	3.961973429	0.009784834	7.3498559	176.3965	7.389919758	7.46207571	0.030273691	22.799612	547.1906738	24	18059.62646

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	04	463.1371	755.9866943	3.282281	15.11325	3.90460491	3.985404015	0.009842691	7.431555271	170.9258	7.45933342	7.602118969	0.030841848	23.3252048	536.4796753	24	18143.68066
	05	466.36	761.2468872	3.300774	15.08065	4.14838457	4.21791935	0.010416938	7.926510811	190.2363	7.505977631	7.602852821	0.030844834	23.4975624	563.9415283	24	18269.92529
	06	464.121	757.5922241	3.3147	15.05609	4.80101442	4.845723629	0.011967425	9.069618225	217.6708	6.997704029	7.065042496	0.02866292	21.7178955	521.2294922	24	18182.21338
	07	465.3655	759.6234741	3.325003	15.03792	4.11674643	4.142635822	0.010231003	7.77458477	186.59	7.210426807	7.257371902	0.029443201	22.3699379	536.878479	24	18230.96338
	08	469.5629	766.475708	3.317753	15.05071	3.9175384	3.949988842	0.009755233	7.483239174	179.5977	7.582131386	7.648218632	0.031028884	23.7846584	570.8317871	24	18395.41699
	09	473.6016	773.0678101	3.31788	15.05049	3.75330663	3.784132957	0.009345622	7.22795105	173.4708	7.86051321	7.928584099	0.032166325	24.8677254	596.8253784	24	18553.62744
	10	468.2743	764.3724365	3.234612	15.19729	3.99090576	4.131540775	0.010203614	7.794937611	163.6937	7.337818146	7.590597153	0.030795105	23.5222244	493.9667053	23.93889	18298.22657
	11	467.368	762.8926392	3.236734	15.19354	3.81335092	3.949927092	0.009755089	7.433492661	178.4038	7.552453518	7.803651333	0.031659465	24.1683407	580.0402222	24	18309.42334
	12	463.7117	756.9238892	3.193404	15.26992	4.03538752	4.226033211	0.010436978	7.899887085	181.6974	7.274634838	7.626104832	0.030939166	23.4045963	538.3057251	24	18166.17334
	13	461.8926	753.9553223	3.25772	15.15654	3.9555347	4.061330795	0.010030207	7.563200474	181.5168	7.363208771	7.572227955	0.030720584	23.1711044	556.1065063	24	18094.92773
	14	461.3676	753.0988159	3.289137	15.10117	4.18129396	4.254638672	0.010507618	7.91342783	189.9223	7.181808472	7.307606697	0.029647013	22.329504	535.9080811	24	18074.37158
	15	464.0439	757.4665527	3.269845	15.13516	4.16475868	4.262531757	0.010527118	7.975408554	191.4098	7.412124634	7.587265968	0.030781591	23.3162174	559.5891724	24	18179.19727
	16	468.4948	764.7314453	3.293905	15.09275	3.89877701	3.962725878	0.009786692	7.485017776	179.6404	7.669891357	7.792665005	0.031614918	24.1795425	580.309021	24	18353.55469
	17	473.2065	772.4221191	3.32665	15.03501	3.47112417	3.500259161	0.008644538	6.661690712	146.5572	7.998366356	8.042167664	0.032627136	25.1841583	554.0515137	24	18538.13086
	18	469.7856	766.8389893	3.320869	15.04522	3.89273667	3.921996593	0.009686105	7.431152344	178.3477	7.683245659	7.743731499	0.031416375	24.0969372	578.3264771	24	18404.13574
	19	467.3568	762.8746948	3.311711	15.06136	3.99687004	4.037749767	0.009971978	7.609780312	182.6347	7.609476089	7.689518452	0.031196421	23.8017826	571.2427979	24	18308.99268
	20	466.8213	762.0003052	3.301918	15.07863	3.93645716	3.989570856	0.009852985	7.508671761	180.2081	7.603594303	7.706689835	0.031266104	23.8299007	571.9176025	24	18288.00732
	21	463.025	755.8029175	3.291362	15.09723	4.00164032	4.068014145	0.01004672	7.593997955	182.256	7.559396267	7.685231686	0.031179037	23.5714378	565.7144775	24	18139.27002
	22	464.2911	757.8702393	3.2333	15.1996	3.45817947	3.578864098	0.008838672	6.691874981	160.605	8.05988121	8.345041275	0.033855889	25.6693916	616.0654297	24	18188.88574
	23	463.2306	756.1390991	3.238388	15.19063	4.21801949	4.356684685	0.010759639	8.136608124	195.2786	7.542225836	7.795299053	0.031625584	23.9184952	574.0438843	24	18147.33838
	24	466.7857	761.9420166	3.302045	15.07839	4.75681686	4.823788643	0.011913245	9.074188232	217.7805	7.513926506	7.612466335	0.030883824	23.539463	564.9470825	24	18286.6084
	25	467.7114	763.453186	3.308468	15.06707	5.29386616	5.352777004	0.01321967	10.09683609	242.3241	7.208516026	7.291404247	0.029581284	22.5859127	542.0618896	24	18322.87646
	26	465.8954	760.4889526	3.304653	15.0738	5.50293112	5.570491314	0.013757367	10.46829128	251.239	7.107404232	7.197730064	0.029201241	22.2116203	533.0789185	24	18251.73486
	27	373.1096	664.3022461	2.916736	13.85771	4.79069471	6.777781963	0.016739015	8.867038727	195.0749	6.797717571	7.448176861	0.030217299	20.9713421	461.3695068	21.41944	14228.98418
	28	463.7693	757.0180664	3.306242	15.071	4.43105841	4.483105183	0.011071867	8.391863823	201.4047	7.269567966	7.357721806	0.029850321	22.6021881	542.4525146	24	18168.43359
	29	466.5717	761.5921021	3.324113	15.0395	3.72914171	3.752802849	0.009268244	7.06294632	169.5107	7.599460602	7.650811195	0.0310394	23.6403866	567.3693237	24	18278.21045
	30	468.3055	764.421936	3.316736	15.0525	4.16650915	4.20220232	0.01037813	7.93888998	190.5334	7.506613255	7.573989391	0.030727725	23.4918633	563.8046875	24	18346.12646
Oct03	01	470.5609	768.1035156	3.30249	15.07762	4.13200855	4.186004639	0.010338127	7.942724228	190.6254	7.61869812	7.720398903	0.031321719	24.0586662	577.40802	24	18434.48438
	02	472.5853	771.4086304	3.311902	15.06101	3.88574123	3.926431179	0.009697059	7.483045578	179.5931	7.897557735	7.980189323	0.032375675	24.9749298	599.3983154	24	18513.80713
	03	471.7694	770.0766602	3.336449	15.01775	3.76491213	3.775941133	0.009325393	7.185564518	172.4536	7.933645725	7.958353996	0.032287106	24.8692455	596.8618774	24	18481.83984
	04	468.3214	764.4488525	3.345989	15.00092	3.63677216	3.636713028	0.008981536	6.871160507	164.9079	7.744931221	7.746186641	0.03142634	24.0282536	576.6781006	24	18346.77246
	05	467.6016	763.2738037	3.349105	14.99543	3.55950499	3.555948257	0.008782073	6.705305576	160.9273	7.734279156	7.728191853	0.031353328	23.9336586	574.4077759	24	18318.57129
	06	466.783	761.9375	3.338293	15.01449	3.59495831	3.602544069	0.008897157	6.782817841	162.7876	7.706139565	7.725035667	0.031340517	23.8817749	573.1625977	24	18286.5
	07	465.6844	760.1437378	3.328182	15.03232	3.43581367	3.452826262	0.008527396	6.485004902	155.6401	7.743022919	7.785982132	0.031587787	24.012804	576.307312	24	18243.44971
	08	466.7638	761.9060059	3.32778	15.03303	3.52972126	3.54867959	0.008764125	6.679221153	160.3013	7.775351048	7.81872797	0.031720627	24.1702671	580.0864258	24	18285.74414
	09	468.3376	764.475769	3.33556	15.01932	3.38319039	3.394089222	0.008382337	6.409604549	153.8305	7.907889843	7.933772087	0.03218738	24.6100922	590.6422119	24	18347.41846
	10	478.2474	780.6508179	3.332825	15.02413	3.48986959	3.50353837	0.008652641	6.756952286	162.1669	8.353523254	8.387851715	0.034029573	26.5666046	637.5985107	24	18735.61963
	11	477.5056	779.4401245	3.34408	15.00428	3.6203959	3.622467995	0.008946361	6.976821899	167.4437	8.217750549	8.224168777	0.033365503	26.0154743	624.3713989	24	18706.56299
	12	475.9508	776.9018555	3.33664	15.0174	3.71848965	3.728889942	0.009209186	7.157735348	171.7856	8.030467987	8.054206848	0.032675963	25.3887119	609.3291016	24	18645.64453
	13	478.1705	780.5253906	3.323922	15.03983	3.78780675	3.812842131	0.009416525	7.352931499	176.4704	8.123791695	8.179031372	0.033182397	25.9014034	621.633667	24	18732.60938
	14	478.3077	780.7495728	3.319916	15.04689	4.14377308	4.176455975	0.010314537	8.053012848	193.2723	8.054475784	8.11876297	0.032937866	25.723341	617.3602295	24	18737.98975
	15	478.3786	780.8661499	3.288608	15.1021	3.54704165	3.603233576	0.008898851	6.95650816	159.9997	8.090459824	8.233083725	0.033401679	26.0671654	599.5447998	24	18740.7876
	16	480.8795	784.9467773	3.328628	15.03152	3.95251465	3.979097128	0.009827126	7.701198578	184.8288	8.042867661	8.085001945	0.032800913	25.7578506	618.1884155	24	18838.72266
	17	478.4041	780.9064331	3.284811	15.10878	4.78622913	4.874116898	0.012037538	9.407309532	225.7754	7.749860287	7.894787312	0.032029212	25.0171413	600.411377	24	18741.75439
	18	471.3327	769.3636475	3.28551	15.10755	4.00275278	4.074259758	0.01006215	7.754772186	186.1145	7.686425686	7.828268051	0.031759351	24.442337	586.6160889	24	18464.72754
	19	471.1048	768.9914551	3.315782	15.05419	3.83279967	3.86741662	0.00955131	7.347999096	176.352	7.563370705	7.633272648	0.030968238	23.8174	571.6176147	24	18455.79492
	20	469.4094	766.2244873	3.306435	15.07067	3.89830041	3.944489241	0.00974165	7.469033718	179.2568	7.518379211	7.608852386	0.030869171	23.6594715	567.8272705	24	18389.3877
	21	468.8625	765.3320923	3.283764	15.11062	4.1797719	4.260920525	0.010523137	8.048471451	185.1149	7.443462849	7.58427906	0.030769473	23.5381966	541.378479	24	18367.97021
	22	470.5744	768.1259766	3.295241	15.0904	4.70466995	4.775605679	0.01179425	9.063681602	217.5284	7.427279472	7.542269707	0.030599041	23.5069752	564.1674194	24	18435.02344
	23	475.0466	775.4265137	3.318644	15.04913	4.83630896	4.875701427	0.012041458	9.340875626	224.181	7.560510159	7.624074936	0.030930912	23.9852619	575.6463013	24	18610.23633
	24	472.4807	771.2379761	3.327355	15.03378	4.61897659	4.64521122	0.011472225	8.852444649	212.4587	7.503274441	7.546690941	0.030616984	23.6182632	566.8383179	24	18509.71143
	25	472.9064	771.9331055	3.311647	15.06147	5.03186131	5.084565163	0.012557275	9.694773674	232.6746	7.357644558	7.434376717	0.030161312	23.2860203	558.864502	24	18526.39453
	26	475.33	775.8883057	3.28583	15.107	5.22216415	5.314263821	0.013124563	10.19019604	244.5647	7.45812273	7.596343517	0.030818412	23.9138584	573.9326172	24	18621.31934
	27	475.3654	775.9467773	3.279469	15.1182	4.88766241	4.984924793	0.012311208	9.558670998	229.4081	7.588015556	7.742376328	0.03141088	24.3800201	585.1204834	24	18622.72266
	28	474.6213	774.7314453	3.275018	15.12605	4.5587225	4.655783176	0.011498321	8.913446426	213.9227	7.82156229	7.991622925	0.032422062	25.1224003	602.9376221	24	18593.55469
	29	475.3296	775.8884888	3.261324	15.15018	4.18118668	4.286640644	0.010586662	8.217834473	197.228	8.088391304	8.300159454	0.033673815	26.1282711	627.0784912	24	18621.32373
	30	488.2091	796.9113159	3.307896	15.06808	4.61102819	4.663611412	0.011517663	9.182181358	220.3723	8.514098167	8.613411903	0.034944676	27.8490582	668.3773804	24	19125.87158
	31	488.52	797.4179688	3.296895	15.08747	4.40800476	4.473165035	0.011047312	8.811782837	211.4828	8.56370163	8.693584442	0.035269924	28.1235924	674.9661865	24	19138.03125
Nov03	01	488.8575	797.9694824	3.293587	15.09331	4.86858177	4.944772243	0.012212029	9.750889778	234.0214	8.250502586	8.383127213	0.03401041	27.1382046	651.3168945	24	19151.26758
	02	487.5251	795.7946777	3.280042	15.11718	4.51420736	4.604889393	0.011372642	9.051843643	217.2442	8.359088898	8.528800011	0.03460139	27.5351162	660.8427734	24	19099.07227
	03	488.2115	796.9157715	3.286373	15.1025	4.4754138	4.553113937	0.011244761	8.965626717	215.175	8.384526253	8.533042908	0.03461862	27.5882416	662.1177979	24	19125.97852
	04	490.0992	799.996521	3.273237	15.12918	4.50085258	4.600162506	0.011360951	9.094302177	218.2632	8.39358902	8.581680298	0.034815941	27.8532333	668.4776001	24	19199.9165

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	05	486.4782	797.350647	3.260709	15.15127	4.48145533	4.596382141	0.011351623	9.064284325	217.5428	8.320774078	8.539798737	0.034646027	27.6243916	662.9854126	24	19136.41553	
	06	485.3108	792.1802368	3.284049	15.11012	4.48193264	4.566528797	0.0112779	8.938615799	214.5268	8.18261528	8.339083672	0.033831738	26.8008499	643.2203979	24	19012.32568	
	07	484.9535	791.597168	3.300773	15.08064	4.66667318	4.729938507	0.011681454	9.254055977	222.0974	8.016795158	8.127837181	0.03297469	26.1043663	626.5048218	24	18998.33203	
	08	483.2777	788.8617554	3.299057	15.08366	4.83821678	4.907088757	0.012118966	9.56256485	229.5016	7.776569843	7.88849926	0.032003701	25.2503796	606.0090942	24	18932.68213	
	09	378.7856	706.6264648	2.977135	13.90956	6.94317293	11.8194418	0.029190276	13.60482121	285.7012	7.024934292	7.39814949	0.030014338	22.630022	475.2304688	20.88889	14760.64201	
	10	487.5631	795.8574219	3.30726	15.06921	5.13265753	5.192420483	0.012823638	10.20909691	245.0183	7.79771471	7.890248775	0.03201079	25.4764881	611.43573	24	19100.57813	
	11	487.7805	796.2116699	3.295813	15.08939	5.31151342	5.391711235	0.013315833	10.60637951	254.5531	7.778159618	7.897815704	0.032041486	25.5121002	612.2904053	24	19109.08008	
	12	485.0904	791.8214111	3.283793	15.11057	4.87022495	4.96221447	0.012255113	9.70634079	232.9522	7.901636124	8.052736282	0.03267001	25.869091	620.8582153	24	19003.71387	
	13	488.6681	797.6601563	3.293842	15.09287	5.20435762	5.285891533	0.013054492	10.41850281	250.0441	7.936348438	8.06350708	0.032713711	26.0946465	626.2714844	24	19143.84375	
	14	488.7004	797.7138062	3.29257	15.0951	5.05189276	5.133296013	0.012677629	10.1177063	242.825	7.948431969	8.078907013	0.032776184	26.1461163	627.5067749	24	19145.13135	
	15	488.412	797.243103	3.295877	15.08926	4.70896339	4.780199051	0.011805596	9.414090157	225.9382	8.043345451	8.167043686	0.033133749	26.415554	633.9733276	24	19133.83447	
	16	490.0084	799.8485107	3.298993	15.08378	4.83662796	4.905428886	0.01211487	9.692457199	232.619	8.051930428	8.168026924	0.033137739	26.5050373	636.1209106	24	19196.36426	
	17	491.1015	801.6333008	3.291807	15.09645	5.25221348	5.338737011	0.013185	10.5714159	253.714	7.936191082	8.067892075	0.032731503	26.2403507	629.7684326	24	19239.19922	
	18	488.1182	796.7632446	3.290154	15.09935	4.95363951	5.037480831	0.012440992	9.915230751	237.9655	7.877206326	8.012138367	0.032505304	25.9007092	621.6170044	24	19122.31787	
	19	483.003	788.413269	3.279109	15.11883	4.51627302	4.607712269	0.011379616	8.975024223	215.4006	7.851610661	8.012905121	0.032508407	25.6338215	615.211731	24	18921.91846	
	20	482.5663	787.7003174	3.294731	15.09128	4.16046572	4.225861549	0.010436554	8.226417542	197.434	8.003599167	8.1301651	0.032984119	25.9848995	623.6375732	24	18904.80762	
	21	486.1485	793.5480347	3.304971	15.07323	3.99496412	4.043793201	0.009986907	7.928051949	190.2733	8.33428669	8.439352989	0.034238528	27.1714706	652.1152954	24	19045.15283	
	22	494.2968	806.8486938	3.293651	15.09319	3.99877906	4.061151028	0.010029765	8.102416992	194.458	8.637151718	8.775751114	0.035603303	28.7270451	689.4490967	24	19364.36865	
	23	494.5108	807.1984253	3.28691	15.10508	4.00434399	4.073103905	0.010059283	8.135130882	195.2431	8.538423538	8.693220139	0.035268456	28.4694328	683.2664185	24	19372.76221	
	24	490.0246	799.8754883	3.264653	15.14433	3.59909129	3.689144135	0.009111026	7.29288578	175.0293	8.656707764	8.873931885	0.0360016	28.7966423	691.1193848	24	19197.01172	
	25	490.8494	801.2207642	3.26904	15.13658	3.50370169	3.585147142	0.008854186	7.100920677	170.4221	8.790732384	8.999105453	0.036509428	29.2532578	702.078186	24	19229.29834	
	26	491.6099	802.4629517	3.280423	15.11652	3.88685369	3.964100361	0.009790082	7.860426903	188.6503	8.496769905	8.66752243	0.0351642	28.2213669	677.3128052	24	19259.11084	
	27	488.4455	797.296814	3.26446	15.14465	4.05315208	4.150228977	0.010249764	8.189368248	196.5448	8.186908722	8.393244743	0.034051459	27.1476707	651.5440674	24	19135.12354	
	28	485.7061	792.8259277	3.249263	15.17145	3.7375679	3.845398903	0.009496931	7.542327881	181.0159	8.16751194	8.41326046	0.034132659	27.0549793	649.319519	24	19027.82227	
	29	484.5327	790.9111938	3.258992	15.1543	3.42866039	3.520113468	0.008693578	6.883649826	165.2076	8.345734596	8.570467949	0.03477044	27.5001507	660.0036011	24	18981.86865	
	30	485.2093	792.0143433	3.26745	15.13938	3.65489388	3.74291873	0.009243838	7.321989536	175.7278	8.248753548	8.448376656	0.034275118	27.1476078	651.5426025	24	19008.34424	
Dec03	01	486.7906	794.5971069	3.280487	15.11641	4.02580643	4.105659008	0.010139692	8.059352875	193.4245	8.053520203	8.215995789	0.033332352	26.4877758	635.706604	24	19070.33057	
	02	482.9641	788.3504639	3.325921	15.03632	4.42285824	4.444793701	0.010977247	8.640929222	181.4595	7.863102913	7.914854527	0.03211062	25.3171616	531.6604004	24	18920.41113	
	03	486.6816	794.4180298	3.348242	14.99695	4.29142094	4.287465096	0.010588687	8.41271019	193.4923	8.189501762	8.185678482	0.033209365	26.37463	606.6165161	24	19066.03271	
	04	483.2751	788.8572998	3.391266	14.92109	3.95394492	3.901200056	0.009634743	7.603415489	182.482	8.179594994	8.073092461	0.0327526	25.8397121	620.1530762	24	18932.5752	
	05	480.1597	783.7719727	3.412127	14.88432	3.87874556	3.803392887	0.009393186	7.367235184	176.8136	8.170056343	8.014094353	0.032513242	25.4853992	611.6495972	24	18810.52734	
	06	476.6841	778.0993042	3.416895	14.8759	3.77047801	3.691620827	0.009117141	7.098483086	170.3636	8.019657135	7.854245663	0.031864718	24.7961826	595.1083984	24	18674.3833	
	07	477.2448	779.0139771	3.427962	14.85641	3.61165118	3.524566174	0.008704572	6.784228325	162.8215	8.027606964	7.837015152	0.031794824	24.7708874	594.5012817	24	18696.33545	
	08	486.6482	794.3641357	3.406655	14.89398	3.78557992	3.717679262	0.009181504	7.298380852	175.1611	8.408056259	8.259627342	0.033509374	26.6187782	638.850708	24	19064.73926	
	09	483.9806	790.0097656	3.411045	14.88622	3.35409665	3.290240049	0.008125858	6.426365376	154.2328	8.500108719	8.339690208	0.033834197	26.7331295	641.5950928	24	18960.23438	
	10	479.3544	782.4580688	3.40424	14.89822	3.11879826	3.065479994	0.007570776	5.926239491	142.2298	8.362744331	8.220980644	0.03335258	26.0967579	626.3222046	24	18778.99365	
	11	484.8465	791.4223633	3.412762	14.8832	3.39829469	3.331995487	0.008228981	6.517629623	156.4231	8.459726334	8.295553207	0.033655114	26.6349258	639.2382202	24	18994.13672	
	12	488.7061	797.7228394	3.40901	14.88982	3.87715626	3.805344582	0.009398002	7.504756451	180.1142	8.449234009	8.294288635	0.033649988	26.84375	644.25	24	19145.34814	
	13	482.9233	788.2832031	3.397245	14.91056	3.2658608	3.216497898	0.00794374	6.264094353	150.3383	8.396450996	8.271151543	0.033556111	26.4538708	634.8928833	24	18918.79688	
	14	481.0523	785.2294312	3.394447	14.91549	2.86684034	2.845414639	0.007027282	5.521252155	132.5101	8.431744576	8.312966347	0.033725761	26.4827747	635.5866089	24	18845.50635	
	15	485.6126	792.6735229	3.397945	14.90931	3.30290365	3.252280951	0.008032113	6.370487213	152.8917	8.358294487	8.231575966	0.033395559	26.4746075	635.390625	24	19024.16455	
	16	487.2415	795.3327026	3.376451	14.94722	3.49320841	3.460870743	0.008547267	6.802990437	163.2718	8.455433846	8.380741119	0.034000728	27.0417366	649.001709	24	19087.98486	
	17	484.0851	790.1801758	3.372062	14.95495	3.55028319	3.518333673	0.008689175	6.861348629	164.6724	8.531428337	8.467007637	0.034350708	27.1458912	651.5014038	24	18964.32422	
	18	481.5385	786.0230103	3.395909	14.91292	3.18143964	3.134886265	0.007742187	6.092936993	146.2305	8.476578712	8.353949547	0.033892035	26.6451492	639.4835815	24	18864.55225	
	19	477.0221	778.6508789	3.393239	14.91762	2.83087826	2.79030633	0.006891181	5.370181561	128.8844	8.497405052	8.381583214	0.034004141	26.4744549	635.3869019	24	18687.62109	
	20	475.3903	775.9871826	3.412445	14.88375	2.78747535	2.732969522	0.006749577	5.239285469	125.7429	8.205668449	8.047470093	0.032648638	25.3356419	608.0554199	24	18623.69238	
	21	477.2169	778.9691162	3.417277	14.87524	3.11275744	3.047727585	0.007526933	5.865128994	140.7631	8.064332008	7.897490025	0.032040175	24.9583912	599.0014038	24	18695.25879	
	22	478.0796	780.3773804	3.395782	14.91314	2.91863751	2.874983311	0.007100307	5.542732716	133.0256	8.194540024	8.07670784	0.032767255	25.5712242	613.7094116	24	18729.05713	
	23	477.3902	779.251709	3.375941	14.94812	2.59383345	2.570387125	0.006348048	4.948377132	118.761	8.413620949	8.340615273	0.033837926	26.368391	632.8413696	24	18702.04102	
	24	475.319	775.8704834	3.379057	14.94263	3.04042053	3.008756161	0.007430683	5.767407894	138.4178	8.156701088	8.079517365	0.032778662	25.4337921	610.4110107	24	18620.8916	
	25	480.2558	783.928833	3.389996	14.92334	3.11975384	3.079415321	0.007605188	5.965137959	143.1633	8.356067657	8.248627663	0.033464741	26.2408714	629.7808838	24	18814.29199	
	26	489.3271	798.7363892	3.395528	14.91357	3.64376664	3.591444254	0.008869737	7.08836937	170.1209	8.563384056	8.439653397	0.034239743	27.3482208	656.3572998	24	19169.67334	
	27	494.2964	806.8485107	3.369709	14.9591	4.53519297	4.503126144	0.011121301	8.980158806	215.5238	8.362904549	8.305086136	0.03369379	27.1866531	652.4796753	24	19364.36426	
	28	493.4972	805.5435791	3.340519	15.01056	4.58082104	4.586500168	0.011327215	9.136335373	219.272	8.33190155	8.347062111	0.033864088	27.2783661	654.6807861	24	19333.0459	
	29	482.1617	787.0411987	3.337277	15.01628	3.31927919	3.327744484	0.008218486	6.482642651	155.5834	8.547167778	8.571029663	0.03477272	27.3645077	656.74823	24	18888.98877	
	30	478.4593	780.9962158	3.348618	14.99628	2.76442242	2.760828257	0.006816378	5.330581188	127.934	8.546584129	8.542297363	0.034656163	27.0616665	649.4799805	24	18743.90918	
	31	484.7636	791.2878418	3.384399	14.93321	3.51419497	3.474121332	0.008579988	6.791621208	162.9989	8.462110519	8.36789608	0.033948626	26.8645954	644.7503052	24	18990.9082	
Jan04	01	482.0987	786.9380493	3.364812	14.96774	3.34519243	3.326473713	0.008215348	6.466556072	155.1974	8.370534897	8.325438499	0.033776365	26.5800133	637.9202881	24	18886.51318	
	02	480.5611	784.4267578	3.370472	14.95776	3.16840339	3.145130873	0.007767486	6.096082687	146.306	8.243347168	8.184911728	0.033206243	26.0485668	625.1655884	24	18826.24219	
	03	399.4506	711.3051147	2.973625	13.28878	4.84914398	5.144220829	0.012704618	9.479654312	208.5524	7.998771191	8.169553757	0.03314393	25.7617817	566.7592163	20.96389	14911.72088	
	04	501.03	817.8399048	3.387833	14.92715	5.97082472	5.894871235	0.014558479	11.9140501	285.9372	8.658139229	8.552778244	0.034698673	28.3776455	681.0634766	24	19628.15771	
	05	497.6345	812.2971191	3.37168	14.95562	5.53027725	5.486560345	0.013550071	11.01804256	264.433	8.684847832	8.619854927	0.034970809	28.4082413	681.7977905	24	19495.13086	

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	06	491.3411	802.0234375	3.381856	14.93769	4.75888395	4.708983898	0.011629723	9.339430809	224.1463	8.757663727	8.666162491	0.035158671	28.1991043	676.7785034	24	19248.5625
	07	486.9014	794.7766113	3.381421	14.93845	4.71689272	4.667942524	0.011528356	9.161972046	210.7254	8.406217575	8.318997383	0.033750236	26.8086395	616.5986938	24	19074.63867
	08	485.0168	791.7004395	3.394193	14.91593	5.08432531	5.010434628	0.0123742	9.799455643	235.1869	8.168307304	8.055592537	0.032681592	25.879179	621.1002808	24	19000.81055
	09	485.3518	792.2475586	3.404177	14.89833	4.91834545	4.831336021	0.011931881	9.465238571	227.1657	8.223316193	8.084651947	0.032799486	25.9826756	623.5842285	24	19013.94141
	10	486.2196	793.6645508	3.408056	14.8915	4.44854641	4.367743492	0.010786945	8.564987183	205.5597	8.398199081	8.246973038	0.033458032	26.5556049	637.3344727	24	19047.94922
	11	484.5822	790.9918823	3.430187	14.85248	4.66460657	4.54712534	0.011229968	8.831447601	211.9547	8.700587273	8.489222527	0.034440834	27.2702427	654.4857788	24	18983.80518
	12	486.7115	794.4672241	3.435084	14.84385	4.96460867	4.835784912	0.011942863	9.430140495	226.3234	8.625389099	8.402615547	0.034089457	27.1002827	650.4067993	24	19067.21338
	13	482.0468	786.8527832	3.421155	14.8684	6.96861124	6.805867672	0.016808355	13.0834341	314.0024	8.310281754	8.130518913	0.032985572	25.9922791	623.8146973	24	18884.4668
	14	491.2171	801.8217163	3.405067	14.89677	4.69910526	4.617720604	0.011404321	9.146249771	219.51	8.663066864	8.514151573	0.034541965	27.6971664	664.7319946	24	19243.72119
	15	489.1674	798.4761963	3.418358	14.87333	4.04949522	3.965490103	0.009793509	7.823250771	187.758	8.776901245	8.592555046	0.03486006	27.8357792	668.0587158	24	19163.42871
	16	486.4557	794.0501709	3.422492	14.86604	4.02660179	3.937009573	0.009723181	7.721960545	185.3271	8.70392704	8.51077652	0.034528282	27.4170666	658.0095825	24	19057.2041
	17	488.1454	796.8081055	3.418676	14.87277	4.44775057	4.353237629	0.010751124	8.571050644	205.7052	8.589776993	8.408410072	0.034112971	27.1814709	652.3552856	24	19123.39453
	18	490.2883	800.3059692	3.414734	14.87973	4.96699429	4.866360188	0.012018374	9.623702049	230.9588	8.481825829	8.312330246	0.033723172	26.9895706	647.7496948	24	19207.34326
	19	489.2612	798.6287842	3.406657	14.89397	4.84044266	4.754698753	0.011742612	9.37849617	225.0839	8.514258385	8.36416626	0.033933491	27.1001129	650.40271	24	19167.09082
	20	488.1238	796.7722778	3.412317	14.88399	4.48177385	4.395318985	0.010855064	8.650201797	207.6048	8.615372658	8.449451447	0.034279484	27.3130455	655.5131226	24	19122.53467
	21	490.7635	801.0817261	3.395401	14.91381	5.28146601	5.204360008	0.012853137	10.30150318	247.2361	8.462587357	8.340571404	0.033837747	27.1072464	650.5739136	24	19225.96143
	22	492.7339	804.2971191	3.389168	14.9248	5.72185278	5.646467686	0.013944996	11.23047352	269.5314	8.347960472	8.242934227	0.033441637	26.8991089	645.5786133	24	19303.13086
	23	491.3435	802.0278931	3.411173	14.886	4.94648647	4.853488922	0.011986596	9.616247177	230.7899	8.56990242	8.407399178	0.034108873	27.3570213	656.5684814	24	19248.66943
	24	488.9037	798.0458984	3.418422	14.87323	4.40132761	4.307882309	0.010639117	8.499530792	203.9887	8.683099747	8.500541687	0.034486763	27.5228424	660.5482178	24	19153.10156
	25	488.6402	797.6152954	3.436291	14.84171	4.70943975	4.5860672	0.011326145	9.035573006	216.8537	8.533495903	8.310643196	0.033716328	26.8932285	645.4375	24	19142.76709
	26	488.5493	797.4672852	3.429169	14.85428	4.85268497	4.734208107	0.011692015	9.331097603	223.9463	8.505036354	8.29977417	0.033672236	26.8550339	644.520813	24	19139.21484
	27	487.1399	795.166687	3.415751	14.87794	4.84457588	4.745887756	0.01172085	9.323266983	223.7584	8.335558891	8.166594505	0.03313192	26.3460579	632.3054199	24	19084.00049
	28	485.7085	794.4628296	3.401887	14.90238	4.84489441	4.766478539	0.011771704	9.353474617	224.4834	8.253363609	8.119013786	0.03293889	26.1690998	628.0584106	24	19067.10791
	29	485.519	792.5209351	3.393112	14.91785	4.67780209	4.612055779	0.011390337	9.035344124	216.8483	8.302967072	8.189200401	0.033223651	26.3307991	631.939209	24	19020.50244
	30	484.2831	790.5029297	3.389995	14.92334	4.33169222	4.27486372	0.010557565	8.349712372	200.3931	8.368468285	8.261331558	0.033516284	26.4941998	635.8607788	24	18972.07031
	31	487.6157	795.942688	3.399089	14.90731	4.06539392	4.002360344	0.009884574	7.870178699	188.8843	8.686915398	8.552578926	0.034697868	27.6172409	662.8137817	24	19102.62451
Feb04	01	487.4893	795.7363281	3.400806	14.90428	4.07763577	4.010154247	0.009903821	7.889714718	189.3531	8.736994743	8.597628593	0.034880638	27.7552948	666.1270752	24	19097.67188
	02	480.3703	784.1172485	3.411491	14.88544	2.99781132	2.941219568	0.007263888	5.69962883	136.7911	8.732225418	8.567135811	0.034756929	27.2577343	654.1856079	24	18818.81396
	03	481.9259	786.6554565	3.423445	14.86435	3.02547503	2.95680213	0.007302375	5.746375561	137.913	8.772607803	8.575585365	0.034791213	27.3684216	656.8421021	24	18879.73096
	04	485.8542	793.0681763	3.39611	14.91256	3.89376616	3.836831331	0.009475764	7.518722534	172.9306	8.493258476	8.369566917	0.033955391	26.9253998	619.2841797	24	19033.63623
	05	487.2505	795.3461914	3.394256	14.91583	4.22978306	4.169625759	0.010297664	8.196790695	196.723	8.293906212	8.177163124	0.033174809	26.3873539	633.2965088	24	19088.30859
	06	484.9918	791.6599731	3.384463	14.93309	3.95362663	3.908459187	0.009652665	7.644009113	183.4562	8.326337814	8.232965469	0.033401206	26.4432964	634.6390991	24	18999.83936
	07	487.4562	795.6824951	3.369582	14.95933	4.52295113	4.489855289	0.011088544	8.831773758	211.9626	8.250025749	8.193984032	0.033243045	26.448679	634.7683105	24	19096.37988
	08	487.6257	795.9606323	3.372952	14.95338	4.57493877	4.538058281	0.011207575	8.928908348	214.2938	8.379598618	8.313838005	0.0337293	26.8475246	644.3405762	24	19103.05518
	09	488.5027	797.3910522	3.377595	14.9452	4.59878683	4.555803776	0.011251401	8.979637146	215.5113	8.457181931	8.379493713	0.033995658	27.1099586	650.6389771	24	19137.38525
	10	486.6622	794.3864136	3.362664	14.97152	4.29164219	4.269911766	0.010545343	8.383243561	192.8146	8.396651268	8.356168747	0.033901025	26.9363136	619.5352173	24	19065.27393
	11	485.1076	791.8484497	3.37168	14.95563	4.17859077	4.146639347	0.010240902	8.11242485	194.6982	8.447324753	8.385486603	0.034019977	26.9397545	646.5540771	24	19004.36279
	12	485.0413	791.7407837	3.385417	14.93141	4.26730394	4.21655035	0.010413565	8.250980377	198.0235	8.395814896	8.299860954	0.033672597	26.6598415	639.8361816	24	19001.77881
	13	485.3625	792.2654419	3.376832	14.94655	4.15840101	4.11858511	0.010171607	8.069329262	193.6639	8.442873955	8.368085861	0.033949375	26.8938503	645.4523926	24	19014.37061
	14	480.8599	784.9155273	3.38866	14.9257	3.17810082	3.137317419	0.00774819	6.085021019	146.0405	8.560838699	8.455143929	0.034302577	26.9211617	646.1079102	24	18837.97266
	15	479.8352	783.2427979	3.391395	14.92085	3.32881951	3.283656359	0.0081096	6.353947639	152.4947	8.399152756	8.288550377	0.033626705	26.3379421	632.1105957	24	18797.82715
	16	478.2085	780.5880127	3.413461	14.88198	3.49924994	3.429728746	0.008470353	6.614228725	158.7415	8.151614189	7.992258072	0.032424651	25.3125	607.5	24	18734.1123
	17	477.4318	779.3190308	3.407293	14.89285	3.50735784	3.444252491	0.008506222	6.631436825	159.1545	8.137940407	7.992995262	0.032427639	25.2741413	606.5794067	24	18703.65674
	18	477.1597	778.875	3.380838	14.93947	3.14137578	3.109153748	0.007678635	5.982334614	143.576	8.234603882	8.151218414	0.033069547	25.7599163	618.2379761	24	18693
	19	478.1925	780.5610962	3.389422	14.92434	3.11975336	3.079376698	0.007605096	5.938655853	142.5277	8.353842735	8.248279572	0.033463329	26.1198673	626.87677	24	18733.46631
	20	476.7473	778.2022705	3.396545	14.9118	2.83006289	2.787783861	0.00688495	5.359370232	128.6249	8.564338684	8.438352585	0.034234453	26.6416798	639.4003296	24	18676.85449
	21	475.0688	775.4624023	3.400107	14.90551	2.63707638	2.594864607	0.006408502	4.971944332	119.3267	8.618233681	8.482387543	0.034413103	26.6857548	640.4580688	24	18611.09766
	22	251.2719	546.7781982	2.423517	11.20875	3.54662943	5.915966034	0.014610589	5.428865433	97.71958	6.937661171	7.703565598	0.031253424	20.9826584	377.6878357	16.25	8885.145721
	23	480.483	784.3013306	3.443605	14.82882	2.9025805	2.819932461	0.006964351	5.463732243	131.1296	8.604084015	8.36171627	0.033923533	26.6062965	638.5510864	24	18823.23193
	24	483.1288	788.6195679	3.446277	14.82411	3.40831041	3.309135437	0.008172527	6.446667671	154.72	8.356068611	8.114469528	0.032920465	25.9626827	623.1043701	24	18926.86963
	25	479.2086	782.220459	3.370693	14.95738	2.98199701	2.958425999	0.007306386	5.718905926	131.5348	8.439175606	8.379104614	0.033994082	26.5907784	611.5878906	24	18773.29102
	26	482.3602	787.3640137	3.396609	14.91168	2.90385246	2.859699488	0.007062562	5.56271553	133.5052	8.570378304	8.445703506	0.034264289	26.9785461	647.4851074	24	18896.73633
	27	486.9531	794.8620605	3.401442	14.90316	3.22293448	3.169857502	0.007828554	6.226785183	149.4429	8.547327042	8.409420013	0.034117077	27.1181412	650.8353882	24	19076.68945
	28	488.5493	797.4671021	3.392603	14.91873	3.60640574	3.556358337	0.008783089	7.008010864	168.1923	8.437944412	8.323361397	0.033767935	26.928524	646.2846069	24	19139.21045
	29	485.5964	792.6466064	3.388406	14.92613	3.60179329	3.557605505	0.008786171	6.96819067	167.2366	8.338420868	8.235526085	0.033411592	26.4856758	635.656189	24	19023.51855
Mar04	01	480.3986	784.1621094	3.383255	14.93522	2.98254919	2.950147629	0.007285935	5.71518898	137.1645	8.435400963	8.34392643	0.033851363	26.5451336	637.0831909	24	18819.89063
	02	479.8021	783.1890259	3.398325	14.90865	2.60480213	2.564129591	0.006308074	4.943435669	118.6425	8.720301628	8.587978363	0.034731571	27.2013454	652.8322754	24	18796.53662
	03	481.678	786.2518921	3.375497	14.94889	3.48668957	3.455345392	0.008409859	6.621201515	158.9088	8.294383049	8.222560883	0.032863554	25.8426418	620.2233887	24	18870.04541
	04	484.3652	790.6376953	3.378803	14.94308	3.85442114	3.816814184	0.009289626	7.347111702	176.3307	8.272760391	8.193675041	0.032748107	25.8920746	621.40979	24	18975.30469
	05	484.1735	790.3237915	3.393112	14.91785	4.44330025	4.380259037	0.010660972	8.428957939	202.295	7.954314709	7.846097469	0.03135892	24.7853127	594.8474731	24	18967.771
	06	480.3795	784.1307373	3.389424	14.92435	4.18097544	4.127434731	0.010045639	7.884602547	189.2305	7.695329189	7.598326206	0.030368634	23.8159122	571.5819092	24	18819.1377
	07	473.7475	773.3053589	3.393747	14.91674	3.71610332	3.664276361	0.008918369	6.907503128	165.7801	7.566233158	7.461384773	0.029821316	23.0676289	553.6231079	24	18559.32861

Unit 1 - CEMS Data

	08	469.5521	766.4578247	3.390885	14.92177	3.83502388	3.784256697	0.00921039	7.059186935	169.4205	7.40995121	7.313051701	0.029228479	22.4080791	537.7938843	24	18394.98779	
	09	469.8707	766.9779663	3.385098	14.93199	4.15219927	4.10340786	0.009987151	7.666392803	183.9934	7.349378109	7.265963078	0.029040262	22.2766991	534.6408081	24	18407.47119	
	10	466.9645	762.2333374	3.405895	14.89531	3.90577364	3.836599112	0.009337776	7.123034	170.9528	7.393098354	7.265358925	0.029037854	22.1380672	531.3135986	24	18293.6001	
	11	468.3539	764.5025635	3.380774	14.93959	3.82325959	3.783149481	0.009207696	7.04312849	169.0351	7.491033554	7.414587498	0.029634278	22.6619625	543.887085	24	18348.06152	
	12	469.8981	767.0226271	3.405258	14.89643	3.72882342	3.66465497	0.008919292	6.844927311	164.2782	7.652719498	7.521190643	0.030060351	23.0603542	553.4484863	24	18408.54785	
	13	470.3018	767.6820068	3.412698	14.88332	3.77397418	3.699625492	0.00900441	6.915041447	165.961	7.573069572	7.426277161	0.029681005	22.7904167	546.9699707	24	18424.36816	
	14	470.1733	767.4713135	3.404431	14.8979	4.05776215	3.987334251	0.009704654	7.451729774	178.8415	7.407248974	7.280828476	0.029099688	22.3371964	536.0927124	24	18419.31152	
	15	467.3405	762.8477783	3.410981	14.88634	4.03439188	3.956971645	0.009630746	7.351224899	176.4294	7.255418777	7.118339062	0.028450251	21.7060165	520.944397	24	18308.34668	
	16	466.2639	761.0899658	3.40176	14.9026	4.07795334	4.008945942	0.00975725	7.43412447	178.419	7.225687981	7.107897282	0.028408526	21.6251793	519.0043335	24	18266.15918	
	17	465.4528	759.7669678	3.385544	14.93119	3.84186125	3.795245409	0.009237129	7.02255106	168.5412	7.309154987	7.224716187	0.028875422	21.9408379	526.5800781	24	18234.40723	
	18	465.1927	759.3410034	3.382873	14.9359	3.54312921	3.502702951	0.008525121	6.479273796	155.5026	7.471318722	7.390649319	0.029538592	22.4333782	538.401123	24	18224.18408	
	19	466.8654	762.0720215	3.399344	14.90685	3.63009405	3.571295023	0.008692066	6.627098083	159.0504	7.494371891	7.37834692	0.029489446	22.4759293	539.4223022	24	18289.72852	
	20	467.2094	762.6325684	3.389169	14.92479	3.94313407	3.890655756	0.009469347	7.227601528	173.4624	7.303908825	7.211168766	0.028821267	21.9850254	527.640625	24	18303.18164	
	21	466.5245	761.5159912	3.382047	14.93736	3.89639163	3.852078438	0.009375455	7.145724773	171.4974	7.343177795	7.266301632	0.02904162	22.1171875	530.8125	24	18276.38379	
	22	465.4094	759.6953125	3.380393	14.94027	3.60243082	3.564758778	0.008676156	6.594604015	158.2705	7.471159935	7.396278858	0.029561117	22.4617577	539.0822144	24	18232.6875	
	23	471.7501	770.0452271	3.412826	14.88308	3.92008162	3.842374086	0.009351836	7.207056999	172.9694	7.614563465	7.467140198	0.029844329	22.9842701	551.6224976	24	18481.08545	
	24	479.2883	782.3504028	3.39343	14.91729	4.05156136	3.994854689	0.009722956	7.610383511	182.6492	7.901530743	7.792346478	0.031144096	24.3671551	584.8117065	24	18776.40967	
	25	478.0222	780.2831421	3.395762	14.91315	4.19750977	4.135415077	0.010065057	7.860364437	188.6488	7.834280968	7.72084856	0.030858325	24.0814209	577.9541016	24	18726.79541	
	26	482.8792	788.2115479	3.40405	14.89856	4.31865597	4.244552612	0.010330693	8.146501541	195.516	7.960674763	7.826241493	0.031279564	24.6561966	591.7487183	24	18917.07715	
	27	482.3465	787.3415527	3.393492	14.91717	4.46892879	4.425692081	0.010771573	8.484372139	203.6249	7.881022453	7.771841526	0.031062141	24.4585285	587.0046997	24	18896.19727	
	28	474.6319	774.7493896	3.380393	14.94026	4.13963938	4.096386433	0.009970071	7.731012821	185.5443	7.654628754	7.577921867	0.030287096	23.4719543	563.3269043	24	18593.98535	
	29	469.9616	767.1259766	3.354192	14.98646	3.65966415	3.645009518	0.00887148	6.818966866	163.6552	7.699939251	7.682569027	0.030705342	23.5566044	565.3585205	24	18411.02344	
	30	472.6186	771.4623413	3.3975	14.91011	3.67301965	3.616891623	0.008803044	6.796778202	163.1227	7.796761036	7.680183887	0.0306958	23.6851921	568.4445801	24	18515.09619	
	31	476.1208	777.1799927	3.395719	14.91325	3.94456506	3.886658192	0.009459617	7.354376793	176.505	7.88420105	7.769775867	0.031053884	24.1360035	579.2640991	24	18652.31982	
Apr04	01	477.198	778.9376831	3.368564	14.96113	3.54773879	3.52204299	0.008572191	6.680569172	160.3337	8.242713928	8.190312386	0.032734662	25.4983788	611.9611206	24	18694.50439	
	02	477.1758	778.9019165	3.386878	14.92883	3.20798993	3.168179274	0.007710936	6.009085178	144.218	8.442396164	8.344419479	0.033350598	25.9750843	623.4019775	24	18693.646	
	03	473.3107	772.5924683	3.40901	14.88981	3.4808054	3.415917397	0.008313896	6.427574158	154.2618	7.955585957	7.809639931	0.0312132	24.1174965	578.8198853	24	18542.21924	
	04	452.5637	770.8447876	3.390668	14.92215	3.33170652	3.286179543	0.007998128	6.170413971	141.9195	7.893374443	7.790288925	0.031135874	24.0029964	552.0689087	24	18500.2749	
	05	474.8626	775.1260986	3.400679	14.90451	3.61944294	3.560501337	0.0086658	6.721105099	161.3065	7.933327675	7.807003498	0.031202676	24.1883907	580.5214233	24	18603.02637	
	06	477.1647	778.8839722	3.393492	14.91717	3.7575984	3.705011368	0.009017515	7.02758646	168.6621	7.96194458	7.85183239	0.031381864	24.4462585	586.7102051	24	18693.21533	
	07	476.0939	777.1350098	3.373589	14.95227	3.786057	3.754181147	0.009137189	7.106198311	170.5488	7.958924294	7.894994259	0.031554349	24.5239334	588.5744019	24	18651.24023	
	08	471.258	769.2425537	3.388915	14.92523	3.68112874	3.634667873	0.008846308	6.812661648	163.5039	7.730783463	7.634543419	0.030513387	23.4779243	563.4702148	24	18461.82129	
	09	462.6979	755.269043	3.396609	14.91168	2.91975164	2.873977184	0.006994885	5.28846693	126.9232	7.640319347	7.527069092	0.030083843	22.7239132	545.3739014	24	18126.45703	
	10	461.514	753.3363647	3.384908	14.9323	2.71402502	2.680762768	0.006524626	4.918912411	118.0539	7.7174263	7.631065845	0.030499505	22.9769287	551.4462891	24	18080.07275	
	11	464.5605	758.3096924	3.374415	14.9508	2.63405538	2.610706568	0.006354115	4.821128368	115.7071	7.963217735	7.897240639	0.031563342	23.9358749	574.4609985	24	18199.43262	
	12	467.0114	762.3096313	3.376513	14.9471	2.98223114	2.955938339	0.00719437	5.486847878	131.6844	7.921880722	7.850579262	0.031376842	23.9222755	574.1345825	24	18295.43115	
	13	473.1678	772.3591309	3.41645	14.8767	3.50242949	3.429593325	0.008347184	6.449988842	154.7997	7.961627483	7.798791885	0.031169854	24.075655	577.8156738	24	18536.61914	
	14	476.6375	778.0228882	3.393557	14.91705	3.63104701	3.579439878	0.008711888	6.781929016	162.7663	8.058449745	7.946516037	0.031760275	24.7119007	593.0855713	24	18672.54932	
	15	473.9177	773.5834351	3.400743	14.90439	3.42627573	3.370277405	0.008202815	6.351100922	152.4264	8.028082848	7.90034771	0.031575751	24.4284172	586.2819824	24	18566.00244	
	16	475.7967	776.6506958	3.406911	14.89352	3.253618	3.194989681	0.007776188	6.041528702	144.9967	8.244621277	8.098841667	0.032369081	25.1395454	603.3491211	24	18639.6167	
	17	475.6838	776.4667969	3.412445	14.88375	3.12484217	3.062969208	0.007454869	5.790421486	138.9701	8.341282845	8.181241035	0.032698408	25.3892078	609.3410034	24	18635.20313	
	18	478.4373	780.9602661	3.412889	14.88297	3.63899589	3.568181276	0.008684487	6.78288269	162.7892	8.075460434	7.918607712	0.031648729	24.7164879	593.1956787	24	18743.04639	
	19	475.695	776.4848633	3.407356	14.89273	3.47921705	3.41659379	0.008315543	6.460156441	155.0438	7.92569685	7.78469944	0.031113537	24.1604004	579.8496094	24	18635.63672	
	20	470.547	768.0811768	3.391395	14.92087	3.34916925	3.304579973	0.008042915	6.178995132	148.2959	7.902803421	7.798109055	0.031167122	23.9400959	574.5623169	24	18433.94824	
	21	473.6538	773.1528931	3.380478	14.94013	3.63905048	3.602267027	0.008767446	6.783213139	162.7971	7.89511919	7.815562725	0.03123688	24.1527882	579.6669312	24	18555.66943	
	22	476.6706	778.0767822	3.397501	14.91011	3.64313126	3.586628675	0.008729386	6.794783592	163.0748	8.053997993	7.934644222	0.031712811	24.6763878	592.2332764	24	18673.84277	
	23	475.5909	776.3143311	3.373333	14.95271	4.19067335	4.155880451	0.010114876	7.855164051	188.5239	7.781655788	7.720146179	0.030855516	23.9549923	574.9197998	24	18631.54395	
	24	292.4201	673.8164673	2.928966	13.58467	5.71513748	8.040664673	0.019569909	10.43806076	177.447	6.939507008	7.321393967	0.029261824	21.3423481	362.8199158	16.63889	11211.55762	
	25	473.4317	772.7896729	3.364939	14.96752	4.21722364	4.191030025	0.010200419	7.890904903	189.3817	7.7117033	7.668316364	0.030648379	23.6891041	568.5385132	24	18546.95215	
	26	471.846	770.2023315	3.358071	14.97962	4.74839067	4.730433941	0.011513262	8.871247292	212.9099	7.456056595	7.429785728	0.029695028	22.8771133	549.0507202	24	18484.85596	
	27	470.2032	767.5206299	3.357563	14.98051	4.78336811	4.765408516	0.011598379	8.908515121	213.7564	7.489125252	7.465025425	0.02983588	22.901804	549.6433105	24	18420.49512	
	28	473.5851	773.0408936	3.324367	15.03904	4.23105669	4.254811764	0.01035565	8.011004448	192.2641	8.03857708	8.09295845	0.032345563	25.0047379	600.1137085	24	18552.98145	
	29	478.9015	781.7181396	3.374542	14.95058	3.92930341	3.894336224	0.009478302	7.422611713	178.1427	8.376736641	8.308582306	0.033207357	25.9580574	622.9934082	24	18761.23535	
	30	464.8626	758.8029785	3.328945	15.03097	2.61243343	2.623643637	0.006385604	4.848803997	116.3713	8.255271912	8.297698021	0.033163864	25.1666336	603.9992065	24	18211.27148	
Total		335,408	555376.0066							130,947					448,907	16860.85	13,246,536	
Average		471.7416	781.1195593	3.221922	15.07006	4.00029846	4.476264001	0.011042014	7.865565712	184.1736	8.096477253	8.365987959	0.033896995	26.6681022	631.3747132	23.06546	18121.11577	
Ann Avg.		167,704								65,474					224,454	8430.426	6,623,268	

6493.399819 mmscf/yr

Unit 4 - CEMS Data

Month/Year	Day	Daily Fuel Gas in tons/day	fuel gas heat rate (mmbtu/hr) – lower heating value	Average CO2 conc. (%)	Average O2 conc. (%)	Average CO conc. uncorrected (ppm)	Average CO conc. corrected (ppm)	Average CO emission factor (lb/mmbtu)	Average CO mass emission rate (lb/hr)	CO mass emissions rate (lb/day)	Average NOx conc. uncorrected (ppm)	Average NOx conc. corrected (ppm)	Average NOx emission factor (lb/mmbtu)	Average NOx mass emission rate (lb/hr)	Daily NOx mass emissions rate (lb/day)	Daily turbine run time (hr/day)	Fuel Gas (MMBtu/day)
May02	01	476.1533	813.6337891	3.225234	15.19169	9.04005337	9.345271111	0.023062056	18.76288223	431.5463	5.890170097	6.088109016	0.024680426	20.0759735	461.747406	24	19527.21094
	02	469.8623	802.883728	3.211741	15.2156	8.60233593	8.925287247	0.022025634	17.68825912	424.5182	5.969074249	6.195567608	0.025116028	20.1647625	483.9542847	24	19269.20947
	03	466.7879	797.6306763	3.236289	15.17217	8.74542332	9.005770683	0.022224259	17.7336216	425.6069	5.998804569	6.179169655	0.02504955	19.9801674	479.5239868	24	19143.13623
	04	465.2201	794.9501343	3.21033	15.21809	8.19475651	8.506149292	0.020991292	16.68521309	367.0747	5.794380188	6.015572071	0.024386369	19.3797264	426.3540039	24	19078.80322
	05	462.8572	790.913147	3.213395	15.21268	8.1784811	8.484163284	0.020937029	16.57255936	397.7414	5.503408909	5.707664013	0.023138138	18.289505	438.9480896	24	18981.91553
	06	463.7966	792.5185547	3.219944	15.20108	7.75701427	8.02715683	0.019809237	15.7058754	376.941	5.738546848	5.940617561	0.024082512	19.087038	458.0888977	24	19020.44531
	07	467.7035	799.1939087	3.228975	15.18511	7.90200853	8.157078743	0.020129854	16.09372902	386.2495	5.941093922	6.133389473	0.024863983	19.8700333	476.8807983	24	19180.65381
	08	470.9919	804.8131104	3.214583	15.21057	9.34208679	9.687532425	0.023906667	19.24518394	461.8844	5.653648853	5.860923767	0.023759434	19.1242962	458.9830933	24	19315.51465
	09	469.5831	802.4047241	3.20621	15.22538	9.1746788	9.537149429	0.023535563	18.88926315	453.3423	5.576543331	5.797442436	0.0235021	18.8574162	452.5780029	24	19257.71338
	10	473.6433	809.3432007	3.211233	15.2165	9.49376297	9.854999542	0.024319934	19.69047165	472.5713	5.732506752	5.95081234	0.024123838	19.5250912	468.6022034	24	19424.23682
	11	471.6156	805.8787231	3.236098	15.17251	9.54844952	9.834456444	0.024269242	19.5635376	469.5249	5.813904762	5.989285946	0.024279788	19.5697575	469.6741943	24	19341.08936
	12	466.2747	796.7528076	3.228467	15.18601	9.65434074	9.965907097	0.024593633	19.61089134	470.6614	5.5581007	5.739468098	0.023267072	18.5334167	444.802002	24	19122.06738
	13	465.8652	796.0534058	3.220899	15.1994	10.2039413	10.55751514	0.02605363	20.75098801	498.0237	5.727259636	5.927728176	0.024030266	19.1264133	459.033905	24	19105.28174
	14	466.2938	796.7857056	3.228912	15.18522	9.29581833	9.595700264	0.023680042	18.88092995	453.1423	5.911839962	6.103538036	0.02474295	19.7169075	473.2058105	24	19122.85693
	15	462.3048	789.9693604	3.230057	15.1832	8.94049454	9.225169182	0.022765666	17.99027061	431.7665	5.815019608	6.001277447	0.024328392	19.2205925	461.2941895	24	18959.26465
	16	463.7719	792.4762573	3.235534	15.17351	8.92759895	9.196327209	0.022694495	17.99398804	305.8978	5.857887268	6.035657406	0.024467783	19.3883877	329.6026001	24	19019.43018
	17	458.6243	783.678894	3.216256	15.20761	7.41885328	7.686672688	0.018968996	14.87206268	356.9295	5.946022034	6.161957264	0.0249798	19.5796547	469.9117126	24	18808.29346
	18	459.3076	784.8478394	3.225986	15.19038	7.52155733	7.769464493	0.01917332	15.05596638	361.3432	6.08592701	6.28859663	0.025493158	20.0076714	480.184082	24	18836.34814
	19	131.0219	596.9902344	2.443528	12.51133	6.96776772	15.84272861	0.0390963	13.06828022	117.6145	6.060910225	8.714252472	0.035326444	19.7681503	177.9133453	8.758333	5228.639393
	20	475.3764	812.3052368	3.261153	15.12813	9.28453064	9.49189949	0.023423895	19.04210854	457.0106	6.34284687	6.483407021	0.026282905	21.3455372	512.2929077	24	19495.32568
	21	480.2227	820.5863037	3.260009	15.13015	10.8699417	11.11406612	0.027427055	22.50935364	540.2245	6.02281189	6.15825367	0.024964774	20.4870377	491.6889038	24	19694.07129
	22	477.2309	815.473938	3.197872	15.24013	10.2170897	10.64830875	0.026277691	21.41984367	492.6564	5.701822281	5.939462662	0.024077818	19.6276646	451.4363098	24	19571.37451
	23	474.3266	810.5120239	3.192121	15.2503	9.77746105	10.21207523	0.025201134	20.42442703	469.7618	5.209550381	5.43888998	0.022048574	17.8624573	410.8364868	24	19452.28857
	24	470.5245	804.0148926	3.241976	15.16211	9.28587723	9.547195435	0.023560351	18.83747101	263.7246	5.360413551	5.513916492	0.022352749	17.8192139	249.4689941	24	19296.35742
	25	464.7389	794.1286011	3.241503	15.16294	9.73906517	10.01450825	0.024713559	19.63279915	471.1872	5.976229668	6.146119595	0.024915591	19.7917995	475.0032043	24	19059.08643
	26	465.4454	795.335144	3.249454	15.14887	9.3694334	9.609101295	0.023713125	18.86845398	452.8429	5.727261066	5.87539959	0.023818124	18.9448338	454.6759949	24	19088.04346
	27	465.3688	795.2037354	3.253777	15.14119	9.23064423	9.452640533	0.023327025	18.56335831	445.5206	5.836800098	5.979748249	0.024241129	19.2771492	462.6516113	24	19084.88965
	28	464.542	793.7905273	3.247353	15.15258	10.3859768	10.65972042	0.026305838	20.88513756	501.2433	5.73711729	5.889598846	0.023875674	18.9549046	454.9176941	24	19050.97266
	29	459.1129	784.5145264	3.216607	15.20698	10.9768982	11.37532139	0.028071756	22.01717377	506.395	5.462821007	5.661075592	0.022949288	17.9995651	413.9899902	24	18828.34863
	30	454.2726	776.2428589	3.235589	15.17339	10.8448086	11.17237949	0.02757098	21.40787125	513.7889	5.391167164	5.555291176	0.022520449	17.4828548	419.588501	24	18629.82861
	31	455.0826	777.6278076	3.246273	15.1545	8.6896162	8.920324326	0.022013362	17.11974144	410.8738	5.529484272	5.678566006	0.023020262	17.9020252	429.6485901	24	18663.06738
Jun02	01	463.2751	791.6265869	3.242584	15.16102	8.60980701	8.85052681	0.021841126	17.294384	415.0652	5.604046822	5.760630608	0.023352861	18.4875793	443.7019043	24	18999.03809
	02	470.676	804.2733154	3.243346	15.15965	9.35147095	9.609458923	0.023714008	19.08037567	457.929	5.715335846	5.873668194	0.023811113	19.1519051	459.6456909	24	19302.55957
	03	465.8047	795.9500732	3.252506	15.14346	9.7187233	9.960475922	0.024580238	19.58856201	470.1255	5.777657032	5.921719551	0.024005905	19.1061592	458.5477905	24	19102.80176
	04	461.1213	787.9460449	3.252765	15.14298	8.1111021	8.346940041	0.0205984	16.1623497	355.5717	6.133625507	6.272744656	0.025428904	20.0778313	441.7123108	24	18910.70508
	05	456.2823	779.6793213	3.267959	15.1161	8.8131485	9.023024559	0.022266816	17.31376648	415.5304	5.82090044	5.926336288	0.024024608	18.7636547	450.3276978	24	18712.30371
	06	456.4233	779.9185791	3.294477	15.06916	7.33172941	7.475897312	0.018448858	14.29835415	343.1605	6.353816986	6.406760216	0.025972195	20.3166542	487.5997009	24	18718.0459
	07	459.1982	784.6599731	3.271435	15.10996	6.7884264	6.956274509	0.017166544	13.40855408	321.8053	6.469398975	6.572754383	0.026645109	20.9570999	502.9703979	24	18831.83936
	08	461.3983	788.4202881	3.246845	15.15348	7.84318304	8.051918983	0.019870354	15.66959953	376.0704	5.850790501	6.007385254	0.024353184	19.2000866	460.8020935	24	18922.08691
	09	470.1425	803.3626709	3.263571	15.12386	8.1123457	8.284095764	0.020443304	16.42949104	394.3078	5.824081421	5.949064255	0.024116762	19.3764248	465.0342102	24	19280.7041
	10	464.0684	792.9831543	3.259437	15.13118	7.88897276	8.065826416	0.019904675	15.79332066	379.0397	5.839184284	5.972133636	0.024210274	19.1977882	460.7469177	24	19031.5957
	11	461.1814	788.0494385	3.260328	15.12961	8.56274509	8.752800941	0.021599967	17.04487038	409.0769	5.797689438	5.928233624	0.0240323	18.9374008	454.4975891	24	18913.18652
	12	459.5549	785.2702026	3.263571	15.12386	8.8004303	8.988677979	0.022182055	17.42172432	418.1214	5.586081982	5.705007076	0.023127362	18.1660671	435.9855957	24	18846.48486
	13	458.9012	784.1530151	3.272214	15.10855	9.06003475	9.228977203	0.022775069	17.86617661	393.0559	6.564965725	6.693845272	0.027135991	21.3554268	469.819397	24	18819.67236
	14	463.0219	791.1945801	3.240052	15.16549	7.80019426	8.067463875	0.019908715	15.62928391	265.6978	5.978494167	6.134361744	0.02486793	19.6473064	334.0042114	24	18988.66992
	15	457.5768	781.8901978	3.240867	15.16406	8.51537037	8.758826256	0.021614842	16.90851593	405.8044	5.388463497	5.543169022	0.022471309	17.5716419	421.7193909	24	18765.36475
	16	460.6601	787.1574097	3.242584	15.16101	8.78326225	9.026804924	0.02227615	17.54013824	420.9633	5.382738113	5.534435749	0.022435892	17.6599159	423.8380127	24	18891.77783
	17	459.2806	784.8009033	3.246972	15.15326	8.69057274	8.918400764	0.022008633	17.28524208	414.8458	5.345537186	5.488102436	0.02224808	17.4626083	419.1026001	24	18835.22168
	18	455.3575	778.09729	3.254691	15.13961	8.11122513	8.309311867	0.020505542	15.94913197	303.0335	5.33866787	5.466825008	0.022161806	17.239006	327.5411072	24	18674.33496
	19	457.088	781.0546265	3.307767	15.04562	6.6155057	6.720143318	0.01658381	12.86725807	308.8142	5.93107748	5.956706047	0.024147721	18.9183826	454.0411987	24	18745.31104
	20	455.1894	777.810791	3.27578	15.10224	8.10534954	8.244924545	0.020346651	15.83158779	379.9581	5.211037636	5.303453922	0.021499526	16.7232914	401.3590088	24	18667.45898
	21	463.6019	792.1852417	3.261161	15.12811	8.77630806	8.969619751	0.022135044	17.51501846	367.8154	5.404566765	5.524656773	0.022396252	17.7164898	372.0462952	24	19012.4458
	22	362.4256	707.6904907	2.942393	13.95267	10.5469475	14.43874359	0.035631653	19.46300888	408.7232	5.181625366	5.648843765	0.022899682	16.7085533	350.8796082	20.88611	14780.90165
	23	459.1596	784.5942383	3.272981	15.10718	10.306489	10.49646664	0.025902946	20.32968712	487.9125	5.684650898	5.789917946	0.023471588	18.4156075	441.9746094	24	18830.26172
	24	458.4069	783.3080444	3.265339	15.12073	10.4521532	10.66888428	0.026328426	20.63949585	412.7899	5.676131248	5.794776917	0.023491289	18.41255	368.2510071	24	18799.39307
	25	462.8739	790.9412231	3.285002	15.08593	8.15305996	8.322607994	0.020538339	16.12222481	370.8112	6.445923328	6.522624016	0.026441883	20.9742088	482.4067993	24	18982.58936
	26	463.608	792.194519	3.290279	15.07658	7.92092466	8.091069221	0.01996698	15.72720051	377.4528	6.423611164	6.484200001	0.026286116	20.8793869	501.1052856	24	19012.66846

Unit 4 - CEMS Data

	27	460.9564	787.6644287	3.276237	15.10143	8.97816753	9.170534134	0.022630828	17.78718758	391.3181	5.768363476	5.85743618	0.023745313	18.7275867	412.006897	24	18903.94629
	28	457.8212	782.3081055	3.219203	15.20236	9.87150669	10.22175694	0.025225004	19.73756599	473.7016	5.410986423	5.604114056	0.022718359	17.7725334	426.540802	24	18775.39453
	29	456.626	780.2659302	3.209962	15.21875	9.78152084	10.15762043	0.025066743	19.56175041	469.482	5.379878521	5.587209702	0.022649828	17.6733875	424.1612854	24	18726.38232
	30	454.5137	776.6560059	3.235589	15.17339	10.8662691	11.1925993	0.027620854	21.45493698	514.9185	5.535364628	5.701883793	0.023114713	17.9515591	430.8374023	24	18639.74414
Jul02	01	449.0138	767.2577515	3.212885	15.21355	6.41454887	6.706662178	0.016550556	12.66231537	303.8956	5.970347404	6.173750401	0.025027592	19.2637157	462.3291931	24	18414.18604
	02	456.7415	780.4631958	3.221217	15.19883	8.89725208	9.206254005	0.022718983	17.74008751	425.7621	5.358733177	5.545623302	0.02248125	17.545845	421.1003113	24	18731.1167
	03	463.7945	792.5137939	3.255282	15.13854	7.24137449	7.45993042	0.018409453	14.52441788	348.586	6.254239559	6.3864007	0.025889654	20.5627384	493.5057068	24	19020.33105
	04	458.7228	783.8478394	3.230755	15.18195	8.7840538	9.062314987	0.022363801	17.54210472	421.0105	5.434408665	5.607600689	0.0227325	17.8187466	427.6499023	24	18812.34814
	05	459.3217	784.8712769	3.229039	15.18499	9.53668308	9.843468666	0.024291487	19.07012939	457.6831	5.300386429	5.472091198	0.022183154	17.4110126	417.8643188	24	18836.91064
	06	457.4124	781.6086426	3.237177	15.17059	9.63732338	9.923185349	0.024488233	19.14310455	459.4345	5.287508011	5.445053577	0.022073558	17.2530994	414.0744019	24	18758.60742
	07	457.7466	782.1813965	3.247481	15.15236	9.75941753	10.01609421	0.024717521	19.33972549	464.1534	5.210559845	5.348633289	0.02168268	16.9602242	407.0454102	24	18772.35352
	08	457.4369	781.6508179	3.212568	15.21412	10.4354296	10.82522488	0.02671423	20.8881073	501.3146	5.330276489	5.533133507	0.022430612	17.5317116	420.7611084	24	18759.61963
	09	456.8873	780.7120972	3.266305	15.11902	8.15415764	8.399404526	0.020727865	16.11020279	386.6449	6.102304459	6.20490694	0.025153892	19.6883717	472.5209045	24	18737.09033
	10	453.868	775.5529785	3.282902	15.08965	7.79214287	7.959212303	0.019641554	15.14001751	363.3604	6.091652393	6.16745472	0.02500207	19.4520245	466.8486023	24	18613.27148
	11	458.566	783.5802002	3.251424	15.14537	7.46209764	7.696046829	0.018992135	14.81107235	355.4657	6.292926788	6.430817127	0.026059712	20.4810791	491.5458984	24	18805.9248
	12	457.0301	780.9561768	3.285892	15.08435	7.18037891	7.342709064	0.018120172	14.10443783	338.5065	6.573215485	6.641350269	0.0269232	21.0656872	505.5765076	24	18742.94824
	13	451.2254	771.0368042	3.263824	15.1234	9.66879368	9.874610901	0.024368346	18.79380417	451.0513	5.541090012	5.660307884	0.022946162	17.6980133	424.7522888	24	18504.8833
	14	447.1732	764.1125488	3.286019	15.0841	9.27452278	9.404745102	0.023208825	17.74072456	425.7774	5.257937908	5.334499836	0.021625392	16.5237675	396.5704041	24	18338.70117
	15	457.9774	782.5756836	3.306686	15.04752	7.650177	7.763353825	0.019158231	14.88714027	357.2914	6.222177982	6.25128746	0.025341934	19.9059086	477.7417908	24	18781.81641
	16	459.9366	785.9227905	3.278919	15.0967	7.26711321	7.43789196	0.018355062	14.34941673	330.0366	6.279196739	6.363682747	0.025797565	20.3280258	467.5445862	24	18862.14697
	17	458.5469	783.5473633	3.261789	15.12702	8.46109867	8.697351456	0.021463128	16.77292252	402.5501	5.851266384	5.965299129	0.024182566	18.9790115	455.4963074	24	18805.13672
	18	460.1455	786.27948	3.281504	15.09212	8.1627388	8.363724709	0.020639831	16.13549805	387.252	6.184498787	6.256810665	0.0253643	20.0071869	480.1724854	24	18870.70752
	19	456.1675	779.4819336	3.278515	15.09743	7.92235756	8.098492622	0.01998527	15.50088978	372.0214	6.031078339	6.114280224	0.024786504	19.3746834	464.9924011	24	18707.56641
	20	335.5914	688.1338501	2.912697	14.17737	11.2599192	25.53477859	0.063014187	18.42118454	368.4237	5.603631973	6.423892975	0.02604164	17.4323406	348.6468201	19.81944	13638.43076
	21	460.8463	787.4767456	3.250026	15.14787	10.2420979	10.50478363	0.02592347	20.42562866	490.2151	5.774002075	5.922563553	0.024009317	18.9077454	453.7858887	24	18899.44189
	22	465.3518	795.1754761	3.282011	15.09123	8.92490292	9.128458977	0.022527011	17.8398304	428.1559	6.459542274	6.540517807	0.026514407	21.1260414	507.0249939	24	19084.21143
	23	463.4368	791.9034424	3.280931	15.09314	9.65575886	9.873979568	0.024366796	19.22273254	461.3456	6.231558323	6.31312418	0.025592608	20.3075256	487.3805847	24	19005.68262
	24	460.9012	787.5705566	3.236457	15.17183	10.4559803	10.82712269	0.026718948	20.9442749	502.6626	6.067591667	6.234498024	0.025273861	19.9523869	478.8572998	24	18901.69336
	25	455.4589	778.270752	3.216638	15.20692	11.8879061	12.31790447	0.030397855	23.66291618	567.91	5.40626955	5.604044437	0.022718079	17.6804867	424.3316956	24	18678.49805
	26	462.5303	790.3543091	3.254603	15.13974	9.19773102	9.474944115	0.023382055	18.37952232	441.1085	6.348095417	6.483437061	0.026283033	20.8309536	499.9429016	24	18968.50342
	27	458.6377	783.7023315	3.236352	15.17205	9.76387596	10.05888939	0.024823099	19.46105766	467.0654	5.81470108	5.989631653	0.024281207	19.0297699	456.7145081	24	18808.85596
	28	457.7587	782.2000732	3.258928	15.13208	10.1928101	10.42632389	0.025729854	20.12386322	482.9727	5.618673325	5.747412682	0.023299284	18.2279129	437.4699097	24	18772.80176
	29	457.6347	781.9890137	3.250724	15.14661	11.2400503	11.52227116	0.028434383	22.24518776	533.8845	5.485602379	5.625733852	0.022806004	17.8335419	428.0050049	24	18767.73633
	30	456.4207	779.9140625	3.276289	15.10136	9.13556004	9.361186028	0.023101311	17.93361664	430.4068	6.051429749	6.137217045	0.024879513	19.4483547	466.760498	24	18717.9375
	31	459.3242	784.8759155	3.25719	15.13517	8.86692715	9.131814003	0.022535287	17.58572769	422.0575	6.198596478	6.324570179	0.025639005	20.1813374	484.3521118	24	18837.02197
Aug02	01	458.0366	782.6743164	3.234378	15.17553	8.57879353	8.891087532	0.021941246	17.11325455	308.0386	6.248518467	6.420973778	0.026029818	20.4624004	368.3231812	24	18784.18359
	02	457.8825	782.411377	3.267767	15.11643	7.79533005	8.015338898	0.019780083	15.39475155	369.474	6.373530865	6.479113579	0.026265513	20.6025543	494.4613037	24	18777.87305
	03	458.3682	783.2423096	3.254794	15.1394	10.0721521	10.31497669	0.025455104	19.93664169	478.4794	5.676223755	5.813924789	0.023568913	18.4622135	443.0931091	24	18797.81543
	04	461.3521	788.3405762	3.241503	15.16293	10.3621292	10.65389633	0.026291467	20.72855759	497.4854	5.765734673	5.929891586	0.024039021	18.9513702	454.8328857	24	18920.17383
	05	461.2968	788.246582	3.24616	15.1547	10.1394501	10.41059113	0.025691018	20.25880051	465.9524	5.767683029	5.923224449	0.024011992	18.9294262	435.3768005	24	18917.91797
	06	465.5	795.4289551	3.239899	15.16578	9.83022404	10.11154079	0.02495303	19.82105637	455.8843	5.916879177	6.088158131	0.024680613	19.5946255	450.6763916	24	18990.29492
	07	463.0545	791.2510986	3.244747	15.15719	10.172575	10.44966507	0.025787437	20.40932846	489.8239	5.850949764	6.011271477	0.024368925	19.2823677	462.7767944	24	18990.02637
	08	463.6017	792.1851807	3.27419	15.10508	8.62109756	8.828686714	0.02178723	17.19064903	412.5756	6.351273537	6.448012352	0.026139408	20.7519798	498.0474854	24	19012.44434
	09	460.4726	786.8382568	3.281186	15.0927	7.95860481	8.13920784	0.020085772	15.74117184	377.7881	6.433787823	6.515782356	0.02641415	20.8287296	499.8894958	24	18884.11816
	10	454.7614	777.0784302	3.252315	15.1438	8.76593113	8.983732224	0.022169862	17.23059654	413.5343	5.753490925	5.897628784	0.023908226	18.5791378	445.899292	24	18649.88232
	11	455.8734	778.9797363	3.250024	15.14785	9.31760597	9.55548954	0.023580838	18.37343407	440.9624	5.742362976	5.890115261	0.023877779	18.6005421	446.4129944	24	18695.51367
	12	458.9946	784.3126221	3.285127	15.08572	7.49723291	7.653745174	0.018887747	14.72943306	353.5064	6.51295948	6.58816576	0.026707584	21.0114212	504.2741089	24	18823.50293
	13	458.0467	782.6930542	3.301853	15.05609	7.42871141	7.549161911	0.018629652	14.51526928	348.3665	6.52122879	6.563622952	0.0266081	20.8790531	501.09729	24	18784.6333
	14	457.7283	782.1483765	3.28038	15.09411	7.18943977	7.335560799	0.018102532	14.09105301	338.1853	6.516192913	6.608108997	0.026788441	21.0046291	504.111084	24	18771.56104
	15	457.2772	781.37854	3.291234	15.07488	7.19373178	7.348726749	0.018135035	14.09533978	338.2881	6.530290604	6.587024212	0.026702963	20.923912	502.1738892	24	18753.08496
	16	457.0745	781.0311279	3.319977	15.024	7.31058502	7.395689487	0.018250925	14.16862392	340.047	6.499923706	6.501933575	0.026358016	20.6538296	495.6918945	24	18744.74707
	17	351.6579	686.666687	2.948281	13.94226	12.0002718	18.17522812	0.044852424	19.81583786	416.1326	5.229654312	5.557079792	0.022527695	16.2070961	340.3490295	20.59167	14139.61188
	18	454.6976	776.9703979	3.284938	15.08603	9.58167744	9.72342968	0.023995267	18.64419937	447.4608	5.859375954	5.946793556	0.024107549	18.7320175	449.5683899	24	18647.28955
	19	462.2061	789.800354	3.319851	15.02423	8.28086281	8.376574516	0.020671507	16.20703697	388.9689	6.746350288	6.749754906	0.02736265	21.6894379	520.5465088	24	18955.2085
	20	461.1812	788.0494385	3.294096	15.06981	9.96705437	10.08596802	0.02468992	19.61679077	470.803	5.911045551	5.982009411	0.024250308	19.1106663	458.6560059	24	18913.18652
	21	465.4507	795.3444214	3.2516	15.14504	9.59580612	9.838226318	0.024278557	19.30611229	444.0406	6.091070652	6.244585991	0.025314748	20.1312389	463.0184937	24	19088.26611
	22	464.3107	793.3963623	3.271391	15.11	10.5031471	10.70262527	0.026411755	20.95705795	502.9694	5.945861816	6.060865402	0.024569983	19.4972591	467.9342041	24	19041.5127
	23	464.4589	793.6498413	3.279978	15.09479	11.2697811	11.45338917	0.028264433	22.44513702	538.6833	5.849359512	5.944927216	0.024099953	19.1285954	459.0863037	24	19047.59619
	24	461.6399	788.8334351	3.271265	15.11021	11.7535667	11.97749138	0.029557796	23.32275391	559.7461	5.749199867	5.858852386	0.023751037	18.7364006	449.673584	24	18932.00244
	25	463.1645	791.4387207	3.273937	15.10549	12.4231958	12.64715385	0.031210337	24.70653725	592.9569	5.760009766	5.865141869	0.023776529	18.8177624	451.6263123	24	18994.5293
	26	463.5221	792.0490723	3.270247	15.11203	11.7297125	11.95478725	0.029501759	23.37945366	561.1069	5.868278027	5.982274532	0.024251375	19.209301	461.0231934	24	19009.17773
	27	463.7307	792.4058838	3.295176	15.0679	9.00059032	9.158841133	0.022601979	17.84319496	428.2367	6.590228558	6.649048328	0.026954392	21.400404	513.6096802	24	19017.74121

Unit 4 - CEMS Data

	28	459.1397	784.5614014	3.158742	15.3094	10.317626	10.88854313	0.026870491	21.07360077	484.6928	5.909747124	6.239685059	0.025294887	19.8339729	456.1813965	24	18829.47363	
	29	464.5688	793.8375244	3.243094	15.1601	8.68198395	9.033244133	0.022292053	17.5891819	422.1404	6.692136288	6.848737717	0.027763916	22.09935	530.3843994	24	19052.10059	
	30	462.3358	790.0209351	3.289263	15.07839	9.365942	9.556282997	0.023582762	18.5227108	444.545	6.484980106	6.552086353	0.026561333	21.0407295	504.9775085	24	18960.50244	
	31	455.6347	778.571228	3.259118	15.13173	10.5758057	10.81684971	0.026693605	20.78267097	498.7841	5.65349102	5.782910824	0.023443189	18.2534618	438.0830994	24	18685.70947	
Sep02	01	455.937	779.0876465	3.260199	15.12984	10.993926	11.24061584	0.027739309	21.62697411	519.0474	5.663665771	5.79131031	0.023477238	18.2900791	438.9619141	24	18698.10352	
	02	455.4778	778.3037109	3.25244	15.14357	10.7637119	11.03020668	0.027220096	21.18939972	508.5456	5.697371006	5.839907169	0.023674237	18.4260921	442.2261963	24	18679.28906	
	03	460.379	786.6787109	3.291805	15.07388	8.6322155	8.801743507	0.021720758	17.01841354	408.4419	6.507236958	6.569762707	0.026632993	20.9946365	503.8713074	24	18880.28906	
	04	462.9695	791.1054077	3.288371	15.07997	8.25892544	8.433421135	0.020811781	16.35596466	392.5432	6.606761456	6.676556587	0.027065916	21.4716663	515.3200073	24	18986.52979	
	05	465.5273	795.4760132	3.257402	15.13479	11.3018913	11.56567097	0.028541492	22.70678711	544.9629	5.847134113	5.983733654	0.024257291	19.2975082	463.1401978	24	19091.42432	
	06	465.5941	795.588623	3.260519	15.12928	10.7923374	11.0324707	0.027225596	21.66616249	519.9879	5.882110596	6.014169693	0.02438068	19.3979244	465.5502014	24	19094.12695	
	07	428.0909	731.5054321	2.97759	14.32375	11.20364	18.33161545	0.045238376	22.60116959	542.4281	5.593713284	6.160807133	0.024975121	18.568327	445.6398621	24	17556.13037	
	08	470.5057	803.9820557	3.237645	15.16972	11.6020536	11.94359589	0.029474158	23.70252037	568.8605	5.937171459	6.114482403	0.024787337	19.9286633	478.2879028	24	19295.56934	
	09	465.3625	795.1941528	3.23794	15.1692	10.0629168	10.37843704	0.025611684	20.39987564	489.597	5.94840765	6.125682354	0.024832742	19.7491131	473.9786987	24	19084.65967	
	10	461.1566	788.0072632	3.254731	15.13951	9.80728149	10.04282093	0.024783438	19.53468323	468.8324	5.906116962	6.049115181	0.024522325	19.3247032	463.7929077	24	18912.17432	
	11	462.1241	765.0200195	3.250985	15.16085	9.65458012	9.92491436	0.024504764	18.75543213	412.6195	5.892661572	6.058008671	0.024570905	18.7906399	413.394104	24	18360.48047	
	12	461.333	753.0404053	3.258801	15.15464	9.60234928	9.859946251	0.024350971	18.3426342	440.2232	5.926149368	6.085679531	0.024689646	18.5938301	446.2518921	24	18072.96973	
	13	464.4952	758.2019653	3.280805	15.11585	8.97769547	9.204096794	0.022731261	17.14955521	411.5893	6.43473959	6.5481143	0.026565738	20.1919785	484.6075134	24	18196.84717	
	14	358.2468	668.3101807	2.902227	14.04356	12.8681288	22.85774422	0.056451354	23.92020988	502.3244	5.31117487	6.106791019	0.024775291	16.5670395	347.9078369	20.66389	13809.88734	
	15	462.753	755.3589478	3.264141	15.14523	11.4702501	11.75692463	0.029035913	21.93855858	526.5254	5.826782703	5.974103928	0.024236972	18.3082256	439.3973999	24	18128.61475	
	16	469.2636	765.9868774	3.258356	15.15543	12.5876083	12.93160439	0.031937052	24.46801758	587.2324	5.906752586	6.06662178	0.02461233	18.8529797	452.4714966	24	18383.68506	
	17	467.9973	763.9195557	3.251423	15.16764	12.3081083	12.66874123	0.031287815	23.91860771	574.0466	5.906434536	6.079408646	0.024664205	18.842371	452.2169189	24	18334.06934	
	18	464.3292	757.9328003	3.231796	15.20226	11.3105211	11.70982933	0.028919592	21.9251709	526.2041	5.841250896	6.048736572	0.024539754	18.5995255	446.3886108	24	18190.38721	
	19	461.2007	752.8251953	3.245827	15.17751	10.8317671	11.16770458	0.027580738	20.77054977	498.4932	5.839820862	6.021684647	0.024430016	18.3919964	441.4078979	24	18067.80469	
	20	465.1511	759.2737427	3.28869	15.10195	8.90678501	9.129218102	0.022546325	17.03079414	408.7391	6.615345478	6.710315228	0.027223783	20.7186661	497.2479858	24	18222.56982	
	21	461.228	752.8699951	3.258992	15.15429	11.9532499	12.27436256	0.030313862	22.82497978	547.7995	5.708499432	5.861840248	0.023781525	17.9050465	429.7210999	24	18068.87988	
	22	460.9129	752.354187	3.264014	15.14544	12.2491169	12.55698299	0.03101185	23.33885765	560.1326	5.658102036	5.801258087	0.023535745	17.7077675	424.9863892	24	18056.50049	
	23	463.577	756.7041016	3.291298	15.09735	9.25861168	9.477165222	0.023405621	17.62290192	422.9497	6.438397408	6.526358128	0.026477475	20.0832329	481.9975891	24	18160.89844	
	24	464.6541	758.4619751	3.289963	15.09971	9.00328636	9.224843025	0.022782473	17.18546295	412.4511	6.545234203	6.636118412	0.026922762	20.4717541	491.322113	24	18203.0874	
	25	460.379	751.484375	3.212885	15.23557	10.266737	10.68758106	0.02639495	19.8394928	476.1478	5.896737576	6.144145966	0.024926851	18.73172	449.5613098	24	18035.625	
	26	462.9976	755.7579346	3.2319	15.20207	9.64224815	9.98433876	0.024658179	18.6420002	447.408	5.993239403	6.207436562	0.025183612	19.0336914	456.8085938	24	18138.19043	
	27	465.5909	759.991272	3.264015	15.14545	9.06068611	9.288489342	0.022939641	17.43696594	418.4872	6.039503574	6.192486763	0.025122957	19.0939751	458.2554016	24	18239.79053	
	28	467.3628	762.883606	3.272664	15.13019	9.82651329	10.04743671	0.024814008	18.93418694	454.4205	5.981475353	6.116457462	0.024814505	18.9303703	454.3288879	24	18309.20654	
	29	466.1647	760.9285278	3.262743	15.14768	9.80966187	10.0627346	0.024851816	18.90945053	453.8268	5.875909805	6.026614189	0.024450017	18.6056461	446.5354919	24	18262.28467	
	30	468.2941	764.4038696	3.255875	15.15979	11.0759678	11.37906647	0.028102743	21.49460411	515.8705	5.860488415	6.023914814	0.024439067	18.6807632	448.3382874	24	18345.69287	
Oct02	01	472.1627	770.7177734	3.2464	15.1765	9.98709106	10.29468441	0.02542465	19.59797859	470.3515	6.089266777	6.277197361	0.025466621	19.6281166	471.0747986	24	18497.22656	
	02	472.3001	770.9421387	3.194111	15.26868	10.1376143	10.63208771	0.02625794	20.3889389	468.9456	6.298110962	6.596885204	0.026763605	20.7213001	476.5899048	24	18502.61133	
	03	476.2564	777.3995361	3.217721	15.22707	10.5176258	10.9424181	0.027024329	21.01701736	504.4084	6.137756348	6.385337353	0.02590535	20.1424541	483.4189148	24	18657.58887	
	04	472.8737	771.8791504	3.251995	15.16664	9.16641045	9.436223984	0.023304526	17.99992561	431.9982	6.175278187	6.355358124	0.025783742	19.9038963	477.693512	24	18525.09961	
	05	471.0877	768.9643555	3.262235	15.14859	9.68978977	9.939571381	0.024547629	18.8770256	453.0486	5.990379333	6.145407677	0.024931941	19.1755047	460.2120972	24	18455.14453	
	06	467.2968	762.776062	3.261853	15.14925	9.91904449	10.17676926	0.025133429	19.17749977	460.26	5.771456242	5.921253681	0.024022562	18.3272629	439.8543091	24	18306.62549	
	07	462.8928	755.5876465	3.249241	15.1715	8.79052067	9.051078796	0.022353329	16.89633751	405.5121	5.779247761	5.952690601	0.024150113	18.2475128	437.9403076	24	18134.10352	
	08	458.3655	748.1972656	3.246146	15.17696	7.68419838	7.922904491	0.019567084	14.6472578	351.5342	5.908342838	6.091384888	0.024712779	18.4923286	443.815918	24	17956.73438	
	09	457.1869	746.2734985	3.253755	15.16354	7.47428703	7.686876774	0.018984184	14.16923332	340.0616	5.936430931	6.105697155	0.024770834	18.4866295	443.6791077	24	17910.56396	
	10	458.6479	748.6591797	3.257274	15.15734	7.20327139	7.400707722	0.018277422	13.68410397	328.4185	6.026628494	6.191757679	0.025119988	18.8084545	451.4028931	24	17967.82031	
	11	462.9722	755.7176514	3.269039	15.13659	8.40169621	8.601052284	0.021241896	16.05023003	385.2055	5.956038475	6.097203732	0.024736401	18.6959743	448.7033997	24	18137.22363	
	12	460.6626	751.9463501	3.264843	15.14398	9.72476292	9.968312263	0.024618588	18.51524162	444.3658	5.744588375	5.888384819	0.023889208	17.9650173	431.1604004	24	18046.7124	
	13	457.4259	746.6635742	3.259437	15.15352	9.02634525	9.268398285	0.022890026	17.1025753	410.4618	5.744747162	5.898276806	0.023929354	17.8679867	428.8316956	24	17919.92578	
	14	456.2994	744.8250122	3.261598	15.1497	8.31648064	8.532914162	0.021073621	15.70017052	376.8041	5.864302635	6.017036915	0.024411162	18.1822453	436.3739014	24	17875.80029	
	15	457.6019	746.9506226	3.264778	15.1441	7.54683638	7.736719608	0.019107262	14.27588749	342.6213	6.045068741	6.196494102	0.02513922	18.7782001	450.6767883	24	17926.81494	
	16	460.2307	751.2421875	3.243411	15.18175	7.23220634	7.461267471	0.018426996	13.84692097	332.3261	6.189585209	6.386315823	0.025909321	19.4649715	467.1593018	24	18029.8125	
	17	459.0776	749.3588257	3.266367	15.14129	7.29993343	7.479418755	0.018471804	13.84578323	332.2988	6.071620464	6.220998764	0.025238629	18.914505	453.9480896	24	17984.61182	
	18	461.7617	753.7401733	3.299438	15.083	8.22506618	8.34377861	0.020606516	15.53915024	372.9396	6.196103573	6.282418251	0.025487816	19.2119217	461.0860901	24	18089.76416	
	19	462.3541	754.7085571	3.269674	15.13547	8.87674046	9.084022522	0.022434691	16.9376049	406.5025	5.883541584	6.021854401	0.024430709	18.4387207	442.5292969	24	18113.00537	
	20	460.5582	751.7758179	3.262045	15.14892	8.26465225	8.478014946	0.020938043	15.74915791	377.9798	5.882268906	6.034818649	0.024483301	18.4069462	441.7666931	24	18042.61963	
	21	459.4158	749.9103394	3.265033	15.14367	7.5857873	7.77477932	0.019201271	14.40224552	345.6539	5.920743465	6.068722725	0.02462085	18.4642124	443.1411133	24	17997.84814	
	22	463.4503	756.4979248	3.270503	15.134	8.15813351	8.346660614	0.020613637	15.59740448	374.3377	5.943159103	6.081417561	0.024672341	18.6649837	447.9595947	24	18155.9502	
	23	464.0359	757.4530029	3.259055	15.1542	8.66338634	8.894636062	0.021966971	16.64342117	399.4421	5.92757988	6.086559772	0.024693197	18.7050743	448.9217834	24	18178.87207	
	24	466.063	760.7624512	3.241884	15.18445	8.76656628	9.049424171	0.022349238	17.004179	408.1003	5.967484951	6.159958363	0.02499098	19.012558	456.3013916	24	18258.29883	
	25	463.0988	755.9238892	3.253586	15.16383	7.89835262	8.125544548	0.02006755	15.17471218	364.1931	6.14252615	6.318041801	0.025632326	19.3767204	465.0412903	24	18142.17334	
	26	463.9615	757.3319092	3.261534	15.14983	7.75446987	7.955358982	0.019647243	14.88424206	357.2218	6.134895802	6.294868946	0.025538333	19.3408375	464.1801147	24	18175.96582	
	27	465.2453	759.4262695	3.266177	15.14164	8.33587646	8.539960861	0.021091016	16.02144623	384.5147	6.016293526	6.164532661	0.025009543	18.9939365	455.8544922	24	18226.23047	
	28	464.7281	758.583252	3.254794	15.16172	8.62093544	8.862000465	0.021886375	16.60762024	398.5829	5.97781992	6.146371841	0.024935879	18.9166622	453.9999084	24	18205.99805	

Unit 4 - CEMS Data

	29	463.4949	756.5696411	3.253585	15.16383	7.93762112	8.164207458	0.020163033	15.25774193	366.1858	6.071936607	6.245790005	0.025339196	19.1718006	460.1231995	24	18157.67139
	30	457.5827	746.9191895	3.231266	15.20319	6.57242107	6.789330006	0.016767507	12.59388447	302.2532	6.19944334	6.422186375	0.026054854	19.451292	466.8309937	24	17926.06055
	31	466.3409	761.2154541	3.247673	15.17426	7.73984432	7.97072649	0.019685192	15.00347519	360.0834	6.225514889	6.415493011	0.026027687	19.8099327	475.438385	24	18269.1709
Nov02	01	472.5688	771.3814087	3.254923	15.16149	9.12014771	9.375720978	0.023155091	17.86506653	428.7616	6.195785046	6.370228767	0.025844058	19.9356213	478.454695	24	18513.15381
	02	470.5736	768.1258545	3.236925	15.1932	8.41664124	8.69953537	0.02148512	16.51325798	396.3182	6.258426666	6.470508099	0.026250884	20.162838	483.9080811	24	18435.02051
	03	471.2306	769.1976929	3.243729	15.1812	8.33269787	8.595486641	0.021228146	16.34231186	392.2155	6.203576565	6.400268555	0.025965936	19.9708214	479.2996826	24	18460.74463
	04	471.6651	769.906189	3.254286	15.1626	8.73158932	8.978081703	0.022173045	17.07422447	409.7814	6.246501923	6.423570156	0.026060482	20.0652828	481.566803	24	18477.74854
	05	471.9204	770.3231812	3.243728	15.1812	9.26704502	9.559584618	0.023609154	18.19817924	436.7563	6.209618568	6.406497002	0.025991203	20.0217743	480.522583	24	18487.75635
	06	470.3684	767.7895508	3.235455	15.19581	8.7440958	9.038566589	0.022322418	17.15271759	394.5125	6.191936493	6.404435158	0.025982847	19.9445782	458.7253113	24	18426.94922
	07	464.7751	758.6593628	3.257825	15.15636	8.55665207	8.787664413	0.021702779	16.47990417	395.5177	5.989689827	6.154482365	0.024968775	18.9466286	454.7190857	24	18207.82471
	08	455.179	742.9954224	3.265669	15.14252	7.62208939	7.809084415	0.019285992	14.33257866	343.9819	5.724503517	5.866662979	0.023801096	17.6846161	424.4308167	24	17831.89014
	09	459.0058	749.2421265	3.287035	15.10486	8.32283974	8.47028923	0.020918967	15.68758297	376.502	5.783698082	5.8884902	0.023889642	17.8998833	429.5971985	24	17981.81104
	10	468.9696	765.507019	3.275908	15.12448	10.2568779	10.48020172	0.025882784	19.81742859	475.6183	5.923604965	6.050976276	0.024548855	18.7925167	451.0203857	24	18372.16846
	11	468.7443	765.1393433	3.257912	15.15621	11.1677036	11.47060394	0.028328767	21.67964554	520.3115	5.818516731	5.976790905	0.024247872	18.5528831	445.2691956	24	18363.34424
	12	463.8323	757.1212769	3.264651	15.14432	9.51793194	9.75749588	0.024097946	18.26974106	438.4738	5.828531742	5.974823475	0.0242399	18.3538494	440.4924011	24	18170.91064
	13	463.9124	757.2512207	3.217381	15.22766	8.82378101	9.180617332	0.022673244	17.16486549	394.7919	5.856935978	6.092569351	0.024717599	18.7116528	430.3680115	24	18174.0293
	14	463.1619	756.0269775	3.246844	15.17571	8.50233459	8.761926651	0.021639204	16.36642456	392.7942	6.055084705	6.240082264	0.02531605	19.1382294	459.3175049	24	18144.64746
	15	463.2172	756.1167603	3.265987	15.14197	8.15829182	8.358375549	0.020642554	15.61897945	374.8555	5.988471031	6.136668682	0.024896504	18.8274994	451.8599854	24	18146.80225
	16	464.7148	758.56073	3.27031	15.13434	8.65416622	8.855038643	0.021869158	16.60668373	398.5604	6.019472599	6.160776615	0.024994329	18.96558	455.1738892	24	18205.45752
	17	465.278	759.4801025	3.265286	15.1432	8.81616974	9.033276558	0.022309367	16.94549942	406.692	6.022652149	6.172772884	0.025042992	19.0225258	456.5405884	24	18227.52246
	18	466.0526	760.7445068	3.256188	15.15924	8.76397896	9.006011009	0.022242032	16.9361496	372.5953	6.045345306	6.213117599	0.025206655	19.1922226	422.2289124	24	18257.86816
	19	467.4207	762.9780273	3.269279	15.13617	9.20850372	9.426574707	0.023280686	17.74140549	372.5695	6.021486759	6.1644454	0.0250092	19.0554905	400.1653137	24	18311.47266
	20	461.3299	753.0358887	3.286616	15.10561	7.94308853	8.086256027	0.019970505	15.04348278	346.0001	6.040086269	6.150808811	0.024953878	18.7939224	432.2601929	24	18072.86133
	21	459.9225	750.7400513	3.303571	15.07571	8.04143906	8.143381119	0.020111591	15.08250046	331.815	5.9839468	6.062319756	0.024594864	18.4296856	405.4530945	24	18017.76123
	22	458.7007	748.7443848	3.327673	15.03322	7.53650379	7.578976154	0.018717701	14.02037907	336.4891	6.01740551	6.052057266	0.024553245	18.3860798	441.2658997	24	17969.86523
	23	431.1157	703.7167358	3.075205	14.17209	7.96146727	13.20712565	0.032617405	14.41978741	346.0749	5.756194115	6.220188141	0.025235359	17.8114395	427.4745178	24	16889.20166
	24	68.3672	669.5817261	2.985985	15.63562	17.2301083	47.95466903	0.118433081	20.52120018	82.0848	6.879260063	8.184060097	0.033202726	20.4047737	81.61909485	3.616667	2421.654154
	25	472.8712	771.8747559	3.329136	15.03064	5.31246758	5.339957237	0.013188	10.19227695	244.6146	6.915031433	6.951145172	0.028200863	21.7656746	522.3762207	24	18524.99414
	26	476.698	778.1216431	3.170994	15.30943	6.55403566	6.91902256	0.017087823	13.28912258	292.3607	6.812456608	7.200922966	0.029214196	22.717308	499.7607922	24	18674.91943
	27	477.9974	780.2425537	3.233554	15.19915	6.11279535	6.312551022	0.015590008	12.16509628	291.9623	6.990390301	7.255318642	0.029434871	22.970417	551.289978	24	18725.82129
	28	475.797	776.6507568	3.317752	15.05072	6.35413504	6.408201218	0.015826238	12.29436684	295.0848	6.826160431	6.885370731	0.027934004	21.6964912	520.7158203	24	18639.61816
	29	420.0715	715.5020142	3.066106	14.13132	6.06369495	9.513086319	0.023494322	11.49721336	264.4359	6.407435894	6.899971962	0.027993226	20.2655144	466.106842	23	16456.54633
	30															0	0
Dec02	01															0	0
	02															0	0
	03															0	0
	04															0	0
	05															0	0
	06															0	0
	07															0	0
	08															0	0
	09															0	0
	10															0	0
	11															0	0
	12															0	0
	13															0	0
	14															0	0
	15															0	0
	16															0	0
	17															0	0
	18															0	0
	19	223.2336	624.6413574	2.111242	14.19208	13.9270487	32.39596939	0.080007784	27.44695282	384.2574	5.613330841	8.434373856	0.034218285	20.2832851	283.9660034	13.425	8385.810343
	20	501.1508	818.0371094	3.177974	15.29713	1.96568453	2.28138876	0.005634312	4.598351479	110.3604	6.884348869	7.087305546	0.028753245	23.5268669	564.6447754	24	19632.89063
	21	265.9777	694.656311	2.914156	13.67225	1.82429528	2.730059385	0.006742394	3.48119998	52.218	7.556559086	9.340159416	0.037893094	24.1665668	362.4985046	14.75	10246.18059
	22	472.745	771.6685791	3.43273	14.84799	2.98795581	2.907999039	0.007181843	5.426578999	130.2379	7.457327843	7.272197723	0.029503355	22.8523006	548.4552002	24	18520.0459
	23	500.7746	817.4227905	3.422427	14.86615	2.3715713	2.319969177	0.005729595	4.635041237	111.241	7.72855711	7.556899548	0.0306584	25.0916958	602.2006836	24	19618.14697
	24	508.0961	829.3737183	3.415622	14.87815	1.97744954	1.937047958	0.004783904	3.96923995	95.26176	7.641592026	7.485908985	0.030370396	25.1929169	604.6300049	24	19904.96924
	25	492.9064	804.5794067	3.409072	14.8897	3.85601163	3.783555031	0.009344191	7.504374504	180.105	6.933950424	6.806992054	0.027616017	22.2260246	533.4246216	24	19309.90576
	26	497.3105	811.7679443	3.401633	14.90283	2.56012821	2.516867399	0.006215876	5.036599636	120.8784	7.386737823	7.267642975	0.029484876	23.9404335	574.5704346	24	19482.43066
	27	339.1462	699.2770996	2.94015	13.51643	5.35179329	17.11651802	0.042272367	9.068906784	172.3092	6.584837437	7.164825916	0.029067721	21.1926727	402.6607971	18.15	12691.87909
	28	489.5055	799.02771	3.3816	14.93814	1.80733705	1.786613703	0.004412374	3.522353649	84.53649	7.631258488	7.553761005	0.030645646	24.4924793	587.819519	24	19176.66504
	29	489.607	799.1937256	3.423508	14.86425	2.55345154	2.495111704	0.00616214	4.867751598	116.826	7.414562225	7.248185635	0.029405942	23.5392838	564.9428101	24	19180.64941

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	30	499.5085	815.3554077	3.41982	14.87076	2.00924587	1.965776682	0.004854851	3.955202818	94.92487	7.572751522	7.410068512	0.0300627	24.5176334	588.4232178	24	19568.52979
	31	499.5709	815.4584961	3.417128	14.87551	1.92254663	1.885162473	0.004655763	3.790375948	90.96902	7.637829781	7.478888988	0.030341912	24.7474174	593.9379883	24	19571.00391
Jan03	01	502.3823	820.0461426	3.395145	14.91426	2.23007488	2.197748661	0.005427749	4.453351498	106.8804	7.520127773	7.412315369	0.030071808	24.6615372	591.8768921	24	19681.10742
	02	500.4205	816.8441772	3.406209	14.89475	2.31831217	2.277522802	0.005624766	4.597789764	110.347	7.375768661	7.246477604	0.02939903	24.0189877	576.4556885	24	19604.26025
	03	495.9066	809.4763184	3.418039	14.87389	2.23770666	2.190870523	0.005410762	4.380561829	105.1335	7.3533535	7.199645042	0.029209005	23.6453285	567.487915	24	19427.43164
	04	496.9827	811.2342529	3.420456	14.86962	2.67904878	2.620841742	0.006472658	5.25294733	126.0707	7.187373161	7.032075882	0.028529184	23.1460876	555.5061035	24	19469.62207
	05	497.1949	811.5796509	3.401759	14.90261	2.53977823	2.497580528	0.006168241	5.007790565	120.187	7.257166386	7.139554501	0.02896522	23.5074081	564.1777954	24	19477.91162
	06	499.1728	814.8083496	3.404621	14.89756	2.39223957	2.351395845	0.005807212	4.733922005	113.6141	7.335706234	7.210569859	0.02925333	23.8374596	572.098999	24	19555.40039
	07	502.6759	820.5259399	3.414732	14.87972	2.68668008	2.631978273	0.00650016	5.337645531	128.1035	7.408200741	7.259939194	0.029453637	24.1702785	580.086731	24	19692.62256
	08	499.7687	815.7814331	3.415686	14.87805	2.43866372	2.38905406	0.005900216	4.814960003	115.559	7.433797836	7.283474922	0.029549126	24.1065121	578.5562744	24	19578.75439
	09	495.0963	808.1533203	3.396227	14.91235	2.36696076	2.332342386	0.005760156	4.655292511	111.727	7.249640942	7.142904758	0.028978804	23.4203835	562.0892334	24	19395.67969
	10	493.6845	805.8485718	3.410535	14.88712	2.44247746	2.39648962	0.005918576	4.769809246	114.4754	7.105177402	6.97225666	0.028286496	22.7946663	547.0720215	24	19340.36572
	11	495.3265	808.5299683	3.411235	14.88589	2.45424366	2.407367229	0.005945443	4.807710648	115.3851	7.105017185	6.970202923	0.028278159	22.8648834	548.7572021	24	19404.71924
	12	494.6315	807.3955688	3.409963	14.88814	2.58190918	2.533756971	0.006257584	5.052889347	121.2693	7.041742325	6.910661221	0.028036596	22.6386127	543.3267212	24	19377.49365
	13	495.1872	808.3014526	3.39502	14.91448	2.62372208	2.585886717	0.00638633	5.163199902	123.9168	7.036336422	6.935734749	0.028138321	22.7451668	545.8839722	24	19399.23486
	14	497.7823	812.5391846	3.37926	14.94228	2.85998869	2.832490921	0.006995363	5.681367874	124.9901	7.164883137	7.09540844	0.02878611	23.3753872	514.2584839	24	19500.94043
	15	498.1318	813.1087036	3.393048	14.91796	3.03898954	2.997353315	0.007402518	6.020282745	144.4868	7.150169373	7.052135468	0.028610567	23.263937	558.3344727	24	19514.60889
	16	500.2086	816.4989624	3.39222	14.91942	3.1823945	3.13901782	0.007752388	6.333902836	152.0137	7.21296978	7.115692616	0.0288684	23.5740414	565.7769775	24	19595.9751
	17	500.9175	817.6560059	3.404303	14.89811	3.12738585	3.074254274	0.007592442	6.209982395	149.0396	7.373383999	7.248292446	0.029406384	24.0443783	577.0651245	24	19623.74414
	18	500.3604	816.7456055	3.412189	14.88421	3.05059624	2.991623402	0.007388372	6.036898613	144.8856	7.4541502	7.310754776	0.029659791	24.2242336	581.3815918	24	19601.89453
	19	500.308	816.6604004	3.410535	14.88712	3.01148677	2.954645395	0.007297049	5.962009907	143.0882	7.462893009	7.322824955	0.029708751	24.2623119	582.2955322	24	19599.84961
	20	505.3984	824.9700317	3.40513	14.89665	3.390347	3.331500769	0.008227762	6.791051865	162.9852	7.499299049	7.370154858	0.029900767	24.6683159	592.0396118	24	19799.28076
	21	499.2856	814.9921875	3.406337	14.89454	3.22913504	3.171430826	0.007832437	6.388059616	153.3134	7.264797688	7.13687849	0.02895437	23.604229	566.5015259	24	19559.8125
	22	494.2532	806.7767334	3.394192	14.91595	3.09511161	3.050505877	0.007533792	6.08008337	145.922	7.128863811	7.029439926	0.028518496	23.0091591	552.2197876	24	19362.6416
	23	493.5438	805.6196899	3.388809	14.92545	3.14341569	3.103788614	0.007665387	6.176460743	142.0586	6.972479343	6.885425568	0.027934222	22.5026264	517.5604248	24	19334.87256
	24	492.0378	803.1622314	3.410662	14.88689	3.18684554	3.126194954	0.007720721	6.201844215	148.8443	6.865268707	6.736908436	0.027331671	21.9517879	526.8428955	24	19275.89355
	25	492.1356	803.319397	3.408247	14.89115	3.10210657	3.045327902	0.007521007	6.044910908	145.0779	6.880531788	6.756021023	0.027409233	22.0180168	528.432373	24	19279.66553
	26	490.6956	800.9694214	3.402522	14.90126	3.06061172	3.00986886	0.00743343	5.954916861	142.918	6.855572701	6.742752075	0.027355384	21.9119377	525.8864746	24	19223.26611
	27	491.1316	801.6824341	3.405829	14.89542	2.91212082	2.861109257	0.007066042	5.66677618	136.0026	7.044604778	6.922040462	0.028082782	22.5145378	540.348877	24	19240.37842
	28	491.1151	801.6555786	3.417658	14.87456	2.92340827	2.86230135	0.007068985	5.668360233	136.0406	6.977989197	6.832811832	0.027720779	22.2228374	533.3480835	24	19239.73389
	29	492.8738	804.5256348	3.394956	14.91461	3.19590759	3.150837898	0.007781581	6.261696339	150.2807	6.903901577	6.805313587	0.027609205	22.2123241	533.0958252	24	19308.61523
	30	491.0767	801.5926514	3.396928	14.91113	3.29304743	3.243920326	0.008011466	6.423712254	154.1691	6.877988338	6.776040554	0.027490446	22.0364704	528.8753052	24	19238.22363
	31	490.1013	800.0008545	3.398007	14.9092	3.08748031	3.04049325	0.007509063	6.009527683	144.2287	7.045081615	6.93817091	0.028148204	22.5202751	540.4866333	24	19200.02051
Feb03	01	492.5109	803.9335938	3.418231	14.87355	2.85711217	2.797757149	0.006909585	5.556445599	133.3547	7.277993202	7.125620842	0.028908679	23.242384	557.8171997	24	19294.40625
	02	496.4205	810.3150635	3.402203	14.90182	2.80941629	2.762214899	0.006821806	5.532497883	132.78	7.379106998	7.258747578	0.029448792	23.863554	572.7252808	24	19447.56152
	03	498.7383	814.0997314	3.395909	14.91292	2.97921205	2.935246229	0.007249137	5.907017708	141.7684	7.397550583	7.290005684	0.029575599	24.0792713	577.9025269	24	19538.39355
	04	496.9397	811.1626587	3.372417	14.95434	2.73646998	2.714736462	0.006704547	5.445002556	125.2351	7.507165432	7.449756145	0.030223722	24.5319614	564.2351074	24	19467.90381
	05	497.2693	811.7006836	3.371997	14.95508	2.67475629	2.653917551	0.006554344	5.323523998	127.7646	7.60089159	7.543868542	0.030605529	24.842371	596.2169189	24	19480.81641
	06	491.4284	802.1668091	3.358006	14.97975	2.37920427	2.369033813	0.005850772	4.704590797	112.9102	7.788971424	7.762845993	0.031493925	25.2648964	606.3574829	24	19252.00342
	07	493.0689	804.8436721	3.40036	14.90506	1.82180429	1.794888735	0.004432807	3.573142052	85.75541	8.054795265	7.928299427	0.032165166	25.8841991	621.2208252	24	19316.25293
	08	400.321	712.855896	2.956626	14.26239	4.9419322	27.59044838	0.068139993	9.609363556	211.406	7.381335258	9.253029823	0.037539609	23.988369	527.7441406	21.23611	15138.28671
	09	502.2034	819.7545166	3.374604	14.95047	2.43548465	2.414319515	0.005962611	4.891853809	117.4045	7.948750019	7.881765366	0.031976379	26.2168159	629.2036133	24	19674.1084
	10	500.1104	816.3374023	3.367101	14.96371	2.47745538	2.462044239	0.006080476	4.965990543	119.1838	7.882771492	7.83425951	0.031783648	25.9497128	622.7930908	24	19592.09766
	11	490.5054	800.6600342	3.375601	14.94872	2.49144745	2.469389677	0.006098614	4.8863554	117.2725	7.519172668	7.455946445	0.030248821	24.2262211	581.4293213	24	19215.84082
	12	486.5713	794.2383423	3.395399	14.91381	2.29939365	2.265713692	0.005595603	4.446900845	106.7256	7.388011932	7.28220892	0.029543966	23.4641418	563.1394043	24	19061.72021
	13	489.9478	799.7496948	3.406529	14.8942	2.70830321	2.66024828	0.006569979	5.254619122	126.1109	7.238088608	7.110935211	0.028849129	23.0741081	553.7786255	24	19193.99268
	14	494.5275	807.2250977	3.419884	14.87063	3.13629007	3.068956614	0.007579361	6.118690014	146.8486	7.070677757	6.918972015	0.028070325	22.6590424	543.8170166	24	19373.40234
	15	491.1453	801.7047729	3.397689	14.90977	3.22913575	3.180325031	0.007854404	6.297685623	151.1445	6.924569607	6.820391655	0.027670383	22.1836205	532.4069214	24	19240.91455
	16	494.3326	806.9067383	3.39241	14.91908	3.07921219	3.037593842	0.007501905	6.05351305	145.2843	7.089913845	6.994084358	0.028375041	22.8964119	549.513916	24	19365.76172
	17	497.9029	812.7355723	3.386879	14.92885	3.01577878	2.979097128	0.007357434	5.981237411	143.5497	7.32918644	7.241929531	0.029380545	23.8789825	573.0955811	24	19505.67773
	18	499.4786	815.3061523	3.378229	14.94408	3.1027441	3.07344532	0.007590446	6.189630032	148.5511	7.319965363	7.251074314	0.029417654	23.985054	575.6412964	24	19567.34766
	19	500.4119	816.8308105	3.366147	14.96539	2.8661747	2.849060297	0.007036284	5.74887228	137.9729	7.507408142	7.463616848	0.030279942	24.7376709	593.7041016	24	19603.93945
	20	500.3654	816.7545166	3.38427	14.93345	2.87476039	2.842340946	0.00701969	5.735271931	137.6465	7.429982662	7.347162247	0.02980748	24.3487587	584.3701782	24	19602.1084
	21	500.5741	817.0953979	3.382108	14.93725	2.98286867	2.95144248	0.00728914	5.955920696	142.9421	7.350966454	7.272950649	0.029506411	24.116024	578.7846069	24	19610.28955
	22	494.373	806.9740601	3.377339	14.94566	2.97857666	2.950997829	0.00728804	5.88320446	141.1969	7.250011444	7.183930397	0.029145246	23.5227451	564.5458984	24	19367.37744
	23	490.1136	800.0186768	3.383317	14.93513	2.73819208	2.708423853	0.006688958	5.351851463	128.4444	7.326325417	7.247144222	0.029401718	23.5238457	564.5723267	24	19200.44824
	24	488.1373	796.7945557	3.371107	14.95665	2.53024077	2.511981726	0.006203804	4.943986893	118.6557	7.394210815	7.340442181	0.029780209	23.7275829	569.4619751	24	19123.06934
	25	490.2037	800.166748	3.386942	14.92873	2.40257406	2.373051167	0.005860693	4.690686703	112.5765	7.452877045	7.364490509	0.029877797	23.9067745	573.7625732	24	19204.00195
	26	493.2609	805.157959	3.392411	14.91908	2.67237115	2.635768414	0.006509523	5.242341042	125.8162	7.389123917	7.289469242	0.029573437	23.8128052	571.5073242	24	19323.79102
	27	496.2251	809.996521	3.380328	14.94039	2.64152837	2.614865065	0.006457895	5.231930733	125.5663	7.523783684	7.448547363	0.030218812	24.4775753	587.461792	24	19439.9165
	28	493.5388	805.6108398	3.383317	14.93511	2.30479836	2.279528379	0.005629721	4.535769463	108.8585	7.596440315	7.513778687	0.030483454	24.5598869	589.4373169	24	19334.66016
Mar03	01	495.261	808.4224854	3.382427	14.93668	2.201298	2.177705765	0.005378252	4.350356102	104.4085	7.68117857	7.599526405	0.030831333	24.9260998	598.2263794	24	19402.13965

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	02	496.7879	810.9158936	3.368118	14.96191	2.65599489	2.639747143	0.006519347	5.289435387	126.9464	7.49325943	7.444878578	0.030203922	24.4927921	587.8270264	24	19461.98145	
	03	494.2445	806.7631836	3.354255	14.98635	2.57650447	2.570215464	0.006347626	5.122600079	122.9424	7.578794003	7.561732292	0.030678004	24.7503376	594.0081177	24	19362.31641	
	04	493.2419	805.1265259	3.367737	14.96258	2.39033127	2.37534833	0.005866363	4.723724365	113.3694	7.638889313	7.590903262	0.030796342	24.7955799	595.0938721	24	19323.03662	
	05	496.5575	810.5392456	3.376386	14.94732	2.68524837	2.661766768	0.006573731	5.328142166	127.8754	7.557171345	7.489580154	0.03038528	24.6310577	591.1453857	24	19452.94189	
	06	493.2034	805.0639038	3.370281	14.95811	2.83644366	2.81627202	0.00695531	5.599208355	134.381	7.354624748	7.302753448	0.029627325	23.8547077	572.5130005	24	19321.53369	
	07	492.492	803.9021606	3.372507	14.95417	3.07825923	3.053959608	0.007542321	6.063902378	145.5337	7.315196514	7.259057522	0.029450029	23.6754532	568.2108765	24	19293.65186	
	08	18.59886	242.8743286	1.095847	5.034667	1.19429338	1.239886642	0.003062133	2.092196703	6.27659	2.433099985	2.47497344	0.010040999	7.33309984	21.9993	2.5	607.1858215	
	09	436.3624	777.034668	3.286158	15.1064	3.09412766	3.209423542	0.007926266	6.050611973	133.1135	7.716760159	9.017515182	0.036584109	24.5433636	539.9539795	21.49722	16704.08746	
	10	491.0301	801.5166016	3.372888	14.95351	3.21132874	3.186047554	0.007868537	6.306861877	151.3647	6.985779285	6.931088924	0.028119471	22.5396252	540.9509888	24	19236.39844	
	11	486.5409	794.1890869	3.378547	14.94353	3.05186701	3.022771597	0.0074653	5.930304527	142.3273	6.978941917	6.91300106	0.028046109	22.2764168	534.6340332	24	19060.53809	
	12	482.7588	788.0140991	3.375644	14.94864	3.05939341	3.032781124	0.007490019	5.903839588	141.6922	6.870197296	6.810698509	0.027631067	21.7762508	522.6300049	24	18912.33838	
	13	482.0081	786.7897949	3.380137	14.94073	2.99574447	2.965544224	0.007323963	5.764843941	138.3562	6.89483881	6.826467514	0.027695037	21.7922459	523.013916	24	18882.95508	
	14	485.5603	792.5881348	3.382173	14.93715	2.98461843	2.9527421	0.007292348	5.781315804	138.7516	6.926956177	6.853948116	0.027806517	22.0404453	528.9707031	24	19022.11523	
	15	480.8326	784.8704834	3.390503	14.92244	2.62610841	2.592343807	0.00640228	5.026132584	120.6272	7.010421753	6.919690609	0.028073238	22.037487	528.8997192	24	18836.8916	
	16	488.7115	797.7316284	3.396101	14.9126	2.51815677	2.481191635	0.006127764	4.888906956	117.3338	7.404864311	7.296786308	0.029603105	23.616045	566.7850952	24	19145.55908	
	17	493.7333	805.9291992	3.39292	14.9182	2.6453445	2.609120846	0.006443709	5.193245411	124.6379	7.409474373	7.307960033	0.029648449	23.8959217	573.5020752	24	19342.30078	
	18	496.1538	809.880188	3.390695	14.9221	2.79176998	2.755249262	0.0068046	5.510926723	132.2622	7.385149479	7.288887024	0.029571075	23.9499092	574.7977905	24	19437.12451	
	19	494.6488	807.4224243	3.375813	14.94835	3.02086616	2.994557858	0.007395618	5.97151804	143.3164	7.268454075	7.205173969	0.029231437	23.6040382	566.4968872	24	19378.13818	
	20	492.2197	803.458313	3.382872	14.93591	3.01100993	2.978263378	0.007355376	5.910409927	141.8498	7.150648594	7.074255943	0.028700292	23.0595341	553.428772	24	19262.99951	
	21	442.531	722.3508301	3.0415	13.86866	2.81142998	2.900146723	0.00716245	5.518910408	132.4538	6.718844414	7.442271709	0.030193329	21.5797043	517.9129028	23.75	17155.83221	
	22	486.9778	794.9020996	3.377147	14.946	3.13978672	3.111350775	0.007684058	6.107308865	146.5754	6.877670288	6.8152318	0.027649425	21.9824829	527.5795898	24	19077.65039	
	23	485.3406	792.2294922	3.380263	14.9405	3.13024664	3.098977566	0.007653504	6.064468861	145.5473	6.787844658	6.720058441	0.02726333	21.5994797	518.3875122	24	19013.50781	
	24	487.4227	795.62854	3.394065	14.91617	3.14694118	3.102522135	0.007662254	6.097252846	146.3341	6.835378647	6.739627838	0.027342726	21.7554035	522.1296997	24	19095.08496	
	25	488.9588	798.1353149	3.382999	14.93566	3.50529218	3.467686653	0.008564101	6.83582449	164.0598	6.728225231	6.655218124	0.02700028	21.5506592	517.2158203	24	19155.24756	
	26	485.7721	792.9335327	3.36462	14.96807	3.31609917	3.29752326	0.008143851	6.460873127	155.0609	6.67957592	6.643669128	0.026953408	21.376421	513.0341187	24	19030.40479	
	27	490.7478	801.0546875	3.366846	14.96415	2.65551996	2.639912844	0.006519754	5.226159096	125.4278	7.198978901	7.155680656	0.029030645	23.257967	558.1912231	24	19225.3125	
	28	489.519	799.0501099	3.38516	14.93187	2.72356343	2.691585064	0.006647368	5.314109802	127.5366	7.143175125	7.062002659	0.028650597	22.8931084	549.4345703	24	19177.20264	
	29	491.7058	802.6196899	3.394763	14.91495	3.15806866	3.113447428	0.007689237	6.170585632	148.0941	7.003587246	6.903321743	0.028006833	22.483942	539.614624	24	19262.87256	
	30	489.2366	798.5882568	3.383063	14.93555	3.06935716	3.036454678	0.007499091	5.987379551	143.6971	6.919005394	6.843191147	0.027762879	22.1799126	532.3178711	24	19166.11816	
	31	481.3844	785.7718506	3.367545	14.96292	2.84343958	2.82516551	0.006977277	5.488203526	131.7169	6.862248898	6.819692612	0.027667547	21.7433739	521.8410034	24	18858.52441	
Apr03	01	486.3214	793.8303833	3.390249	14.92289	2.5183146	2.486317635	0.006140423	4.874560356	116.9894	7.206609249	7.113941193	0.028861308	22.912117	549.8908081	24	19051.9292	
	02	489.9864	799.812439	3.359716	14.97672	2.33425665	2.324931383	0.005741855	4.591389179	96.41917	7.42884779	7.40077877	0.030025009	23.9967041	503.9307861	24	19195.49854	
	03	493.6235	805.7498169	3.346785	14.996	2.51847506	2.515978813	0.006213679	5.009426594	120.2262	7.475453377	7.470723152	0.030308766	24.4217377	586.1217041	24	19337.99561	
	04	492.9261	804.6108398	3.354063	14.98668	2.45917344	2.452997923	0.006058132	4.877971649	117.0713	7.432845592	7.416140556	0.030087346	24.2139168	581.1340332	24	19310.66016	
	05	5.741766	112.4684982	0.514345	4.318185	5.91804981	13.70300007	0.03384205	9.775950432	19.5519	3.121175051	8.097000122	0.032849699	8.1473999	16.2947998	2	224.9369965	
	06	459.7749	783.1281738	3.24742	14.87197	2.66640615	2.91177702	0.007191176	5.301093578	121.9251	7.775645256	8.564035416	0.034744356	25.3264313	582.5078735	23.52778	18425.26631	
	07	493.9837	806.3374634	3.367928	14.96225	3.10751247	3.086848259	0.007623547	6.147389889	147.5374	7.230774879	7.185474396	0.029151512	23.5102367	564.2457275	24	19352.09912	
	08	287.2856	662.0344849	2.795734	13.51221	6.55502558	21.13788605	0.052203856	12.62827778	214.6807	6.259651184	7.498546124	0.030421706	20.0901756	341.5329895	16.19444	10721.28083	
	09	488.0277	796.6150513	3.407144	14.8931	3.25563335	3.198724508	0.007899846	6.29623127	151.1096	6.512218952	6.400823593	0.025968187	20.7021542	496.8516846	24	19118.76123	
	10	487.231	795.3146973	3.444813	14.8267	3.40322328	3.305870533	0.008164464	6.494107246	155.8586	6.187199593	6.011061192	0.024386929	19.3966427	465.5194092	24	19087.55273	
	11	488.9696	798.1533203	3.440362	14.83453	3.36109257	3.268909216	0.008073181	6.444896698	154.6775	6.167169571	5.998989105	0.024337925	19.4268341	466.243988	24	19155.67969	
	12	489.8108	799.5254517	3.098587	15.4371	2.65509534	2.940365076	0.007261779	5.806578159	139.3579	5.864832878	6.309103966	0.025596067	20.4676914	491.2246094	24	19188.61084	
	13	489.2279	798.5747681	3.462238	14.79596	2.6723721	2.58336544	0.006380104	5.09596014	122.303	6.560813904	6.341828346	0.025728829	20.5475368	493.1408997	24	19165.79443	
	14	492.7826	804.3776855	3.439576	14.83593	2.29520464	2.233069658	0.005514982	4.435826778	106.4598	6.999559402	6.810874939	0.027631775	22.2277508	533.4660034	24	19305.06445	
	15	497.9642	812.8353271	3.443476	14.82905	2.74725342	2.669673443	0.006593255	5.360476017	128.6514	6.944285393	6.749278545	0.027381884	22.2569084	534.1657715	24	19508.04785	
	16	496.7393	810.835144	3.428556	14.85535	2.95158434	2.880776644	0.007114612	5.766702652	132.6342	7.057142735	6.888355732	0.027946113	22.6549911	521.0648193	24	19460.04346	
	17	494.1462	806.6017456	3.442585	14.83062	3.02367663	2.939161301	0.007258808	5.85530901	140.5274	6.912380219	6.719623089	0.027261559	21.9882793	527.718689	24	19358.44189	
	18	496.3001	810.1176758	3.434573	14.84475	3.09733796	3.01781249	0.007453049	6.038192272	144.9166	6.94174099	6.763834	0.027440937	22.231163	533.5479126	24	19442.82422	
	19	491.8162	802.7990723	3.439724	14.83566	2.97317123	2.892064571	0.007142496	5.735728741	137.6575	6.854618073	6.66908741	0.027056545	21.7209091	521.3018188	24	19267.17773	
	20	488.3625	797.1622314	3.443668	14.8287	2.75758791	2.679407597	0.006617296	5.277370453	126.6569	6.892932892	6.698384762	0.027175391	21.6640625	519.9375	24	19131.89355	
	21	491.6867	802.5883179	3.442205	14.83128	2.49780583	2.428367615	0.005997304	4.813714504	115.5292	7.134588718	6.93646574	0.028141305	22.5877457	542.105896	24	19262.11963	
	22	498.2443	813.2926025	3.44246	14.83084	2.77094197	2.693487883	0.006652073	5.411651134	129.8796	7.282605171	7.079494476	0.028721562	23.3599129	560.6378784	24	19519.02246	
	23	491.7769	802.7362061	3.424589	14.86234	3.03787708	2.969332457	0.007333324	5.887385368	141.2972	6.986414909	6.826897144	0.027696775	22.2329121	533.5899048	24	19265.66895	
	24	491.2391	801.8574219	3.433619	14.84643	3.14678335	3.06588006	0.007571761	6.072762966	145.7463	6.861771584	6.68866539	0.027135959	21.7620087	522.288208	24	19244.57813	
	25	493.7423	805.942749	3.437371	14.83981	3.05329823	2.972652912	0.007341522	5.917628288	142.0231	6.961137772	6.777269363	0.027495442	22.1603832	531.8491821	24	19342.62598	
	26	493.7691	805.9874268	3.423762	14.86379	3.03978467	2.971313715	0.007338212	5.914613724	141.9507	6.994841576	6.836976528	0.027737666	22.356451	536.5548096	24	19343.69824	
	27	491.9116	802.9559326	3.425735	14.86033	3.14296794	3.070140362	0.007582285	6.088925838	146.1342	7.062886238	6.899651051	0.027991941	22.4772491	539.4539795	24	19270.94238	
	28	492.6569	804.1712646	3.43152	14.85012	3.08748055	3.010157824	0.007434145	5.980222225	143.5253	7.100090027	6.924808502	0.028094005	22.5925045	542.2200928	24	19300.11035	
	29	492.5934	804.0682373	3.418674	14.87278	2.83851075	2.778150797	0.00686116	5.519495964	132.4679	7.226323128	7.073904037	0.028698867	23.0752926	553.8070068	24	19297.6377	
	30	492.9645	804.6735229	3.406911	14.89351	2.86092758	2.81003952	0.006939919	5.585720062	134.0573	7.166543961	7.039259911	0.028558329	22.9808044	551.5393066	24	19312.16455	
May03	01	489.5303	799.0680542	3.420329	14.86986	3.01450658	2.949453354	0.007284224	5.821334839	139.712	7.057322979	6.905624866	0.028016184	22.3891335	537.3391724	24	19177.6333	
	02	488.4039	797.2294312	3.435591	14.84295	2.842803	2.768888712	0.006838286	5.451105595	130.8265	7.043172359	6.860995293	0.027835108	22.1943798	532.6651001	24	19133.50635	

Unit 4 - CEMS Data

	03	484.2558	790.4580078	3.447865	14.8213	2.84391665	2.759959936	0.006816237	5.389060497	129.3374	6.928385258	6.725053787	0.027283587	21.5663128	517.5914917	24	18970.99219
	04	489.4563	798.9470825	3.443222	14.8295	3.14026451	3.051635742	0.00753658	6.022399902	144.5376	6.928863525	6.734759331	0.027322983	21.8291454	523.8994751	24	19174.72998
	05	486.7362	794.5074463	3.439025	14.8369	2.28683257	2.225321293	0.00549584	4.366611958	104.7987	7.192936897	6.999557972	0.028397258	22.5627213	541.5053101	24	19068.17871
	06	484.0906	790.1890259	3.434382	14.84507	2.23548126	2.177944899	0.005378838	4.251401424	102.0336	7.250011921	7.064910412	0.028662391	22.6489258	543.5742188	24	18964.53662
	07	483.1623	788.6732788	3.41397	14.86107	2.14422417	2.101979256	0.00519123	4.094383717	98.26521	7.240472794	7.09744072	0.028794371	22.7088242	545.0117798	24	18928.15869
	08	488.6291	797.5969849	3.41136	14.88567	2.10892916	2.069171667	0.005110204	4.076365948	97.83278	7.518536568	7.375801563	0.029923679	23.8679047	572.8297119	24	19142.32764
	09	490.533	800.704895	3.42071	14.8692	2.17363667	2.12631011	0.005251319	4.205071449	100.9217	7.513768673	7.351488113	0.029825041	23.8833828	573.2011719	24	19216.91748
	10	487.3053	795.435791	3.427516	14.8572	2.43739176	2.379671574	0.005877043	4.675343513	112.2082	7.290076733	7.117707253	0.028876588	22.9714661	551.3151855	24	19090.45898
	11	482.0078	786.7697339	3.429612	14.85349	2.36982298	2.312258244	0.00571055	4.493870258	107.8529	7.162410259	6.988807678	0.028353637	22.312479	535.4995117	24	18882.95361
	12	421.6676	718.2113037	3.168297	13.72397	2.44017649	2.415345192	0.005965146	4.558686256	104.8498	6.52970314	6.372753143	0.025854314	20.0990677	462.2785645	23	16518.85999
	13	356.9645	736.0150757	3.269791	15.13525	2.42573357	4.271110058	0.010548306	4.646924019	88.29156	7.039834023	8.86875248	0.035980638	21.6886635	412.0845947	18.24722	13430.23114
	14	481.0327	785.197937	3.39362	14.91694	2.14512467	2.114942789	0.005223246	4.101984978	98.44764	7.186365604	7.086617947	0.028750466	22.5743923	541.7854004	24	18844.75049
	15	478.148	780.4893188	3.404367	14.898	2.21465373	2.177145958	0.005376861	4.200882435	100.8212	7.024095535	6.906229973	0.028018622	21.872488	524.9396973	24	18731.74365
	16	480.148	783.7539673	3.4216	14.86761	2.46378279	2.40959549	0.005950944	4.664646626	111.9515	6.98943615	6.835933685	0.027733438	21.7375126	521.7003174	24	18810.09521
	17	477.0768	778.7402954	3.424081	14.86325	2.34072828	2.28777051	0.005650073	4.400512218	105.6123	7.02234602	6.863685608	0.027846025	21.6859207	520.4620972	24	18689.76709
	18	483.9172	789.9064941	3.418612	14.87289	2.44343328	2.391973734	0.005907424	4.66625452	111.9901	7.215671539	7.063413143	0.028656321	22.6364632	543.2750854	24	18957.75586
	19	480.9726	785.0992432	3.419375	14.87154	2.49510288	2.441739559	0.00603033	4.735677719	113.6563	7.095479965	6.944015026	0.028171934	22.1229172	530.9500122	24	18842.38184
	20	475.7171	776.5206909	3.418358	14.87334	2.51306868	2.460020542	0.006075479	4.719850063	113.2764	6.91264534	6.767416477	0.027455449	21.3212414	511.7098083	24	18636.49658
	21	471.4067	769.4846191	3.378654	14.94334	2.43603086	2.411962271	0.005956793	4.58483696	105.4512	6.843413353	6.776896954	0.027493913	21.1549091	486.5628967	24	18467.63086
	22	467.8434	763.668335	3.423126	14.86492	2.48190713	2.42714715	0.005994289	4.580219269	109.9253	6.83728838	6.68535614	0.027122529	20.7165413	497.196991	24	18328.04004
	23	465.4425	759.7490845	3.434954	14.84407	2.41465664	2.351999283	0.005808699	4.414170265	105.9401	6.762565613	6.588779926	0.026730729	20.3084965	487.4039001	24	18233.97803
	24	469.6234	766.5742188	3.432156	14.849	2.3005054	2.243077993	0.005539699	4.247193336	101.9326	6.968291283	6.794765949	0.02756642	21.1338749	507.2130127	24	18397.78125
	25	474.8302	775.0722046	3.434445	14.84495	2.36235094	2.301703453	0.005684483	4.406607151	105.7586	7.012806892	6.833301067	0.02772275	21.4872837	515.6948242	24	18601.73291
	26	471.9402	770.3546143	3.447293	14.82232	2.55663085	2.481770754	0.006129192	4.722002506	113.3281	6.670196056	6.475247383	0.026270133	20.2390919	485.7381897	24	18488.51074
	27	469.4536	766.2962646	3.438199	14.83836	2.60098791	2.531567574	0.006252179	4.791408539	114.9938	6.589113235	6.413208008	0.026018441	19.943409	478.6417847	24	18391.11035
	28	463.7448	756.9776001	3.425463	14.8608	2.44287038	2.388430357	0.005898677	4.463145256	98.18919	6.869346142	6.7066679	0.027209001	20.6066132	453.3454895	24	18167.4624
	29	465.8821	760.4665527	3.420075	14.87031	2.42149282	2.370108366	0.005853424	4.451144218	106.8275	6.786095142	6.641422272	0.0269443	20.494175	491.860199	24	18251.19727
	30	471.4529	769.56073	3.445828	14.82492	2.41672301	2.346857071	0.005796	4.461107254	107.0666	6.828544617	6.631875515	0.026905563	20.7107964	497.0591125	24	18469.45752
	31	467.6261	763.31427	3.443222	14.82949	2.47379971	2.403936148	0.00593697	4.532877445	108.7891	6.557634354	6.373572826	0.025857626	19.7372246	473.6934204	24	18319.54248
Jun03	01	465.5632	759.9462891	3.443667	14.82871	2.41735911	2.348926783	0.00580111	4.409361362	105.8247	6.63696909	6.450017452	0.026167767	19.8861008	477.2664185	24	18238.71094
	02	463.426	756.4574585	3.44195	14.83174	2.50782084	2.438220024	0.006021639	4.556026459	109.3446	6.577985287	6.395845413	0.025947984	19.6294117	471.105896	24	18154.979
	03	461.2097	752.8386841	3.454225	14.81009	2.44073009	2.36453867	0.005839668	4.396638393	105.5193	6.559859753	6.355565548	0.025784574	19.4123783	465.8970947	24	18068.12842
	04	465.7658	760.2781372	3.465417	14.79036	2.14311123	2.073616266	0.005121179	3.88721323	93.29312	7.249694824	6.99119854	0.028363345	21.5890865	518.1381226	24	18246.67529
	05	462.339	754.6816406	3.46529	14.79059	2.19128299	2.12003088	0.005235808	3.946709633	94.72103	7.031090736	6.781870365	0.02751408	20.7807884	498.7388916	24	18112.35938
	06	463.3814	756.3858032	3.44761	14.82175	2.42149282	2.350346565	0.005804616	4.390402794	105.3697	6.517729759	6.326637745	0.02566722	19.4180832	466.0339966	24	18153.25928
	07	461.4241	753.1883545	3.440169	14.83487	2.42387843	2.357822418	0.00582308	4.386093616	105.2663	6.414390087	6.23969841	0.025314491	19.0700912	457.6821899	24	18076.52051
	08	458.838	748.9684448	3.436736	14.84093	2.46871305	2.403707027	0.0059364	4.446845055	106.7243	6.32074976	6.155024052	0.024970975	18.7029953	448.8718872	24	17975.24268
	09	465.6184	760.0359497	3.459503	14.80078	2.30161929	2.231896639	0.005512082	4.181665421	100.36	7.110742092	6.868959427	0.027867405	21.2081661	508.9960022	24	18240.86279
	10	474.1923	774.0318604	3.451935	14.81412	2.65488458	2.573679209	0.006356176	4.920333385	118.088	6.732995033	6.528475285	0.026486075	20.5044537	492.1069031	24	18576.76465
	11	476.2249	777.3500977	3.388949	14.92519	2.74979639	2.715061903	0.006705352	5.208586693	114.5889	6.729611874	6.645565987	0.026961109	20.942255	460.7296143	24	18656.40234
	12	411.4995	671.5546875	2.963664	13.6845	6.54846668	20.1799736	0.049838137	6.383857727	134.061	6.850566387	7.026310444	0.02850581	20.4632244	429.7277222	22.55	15143.55769
	13	473.3708	772.690979	3.435401	14.84328	2.7520225	2.680652618	0.006620373	5.116331577	122.792	6.677191257	6.50535059	0.026392255	20.3938503	489.4523926	24	18544.5835
	14	471.4779	769.6012573	3.452063	14.81392	2.82340717	2.736849308	0.006759159	5.203621864	124.8869	6.532514572	6.332802296	0.025692221	19.7737713	474.5704956	24	18470.43018
	15	472.3156	770.9689941	3.438645	14.83756	2.88461542	2.806996346	0.0069324	5.34573698	126.2977	6.620115757	6.443325996	0.02614063	20.1539745	483.6954041	24	18503.25586
	16	469.2992	766.0452271	3.459694	14.80045	2.71116376	2.628334999	0.006491163	4.971743107	119.3218	6.786414623	6.559587479	0.026612291	20.3993244	489.5838013	24	18385.08545
	17	465.5637	759.9464722	3.482207	14.76077	2.57348251	2.4793787	0.006123289	4.646598339	111.5184	6.929022312	6.650047302	0.026979292	20.5233536	492.5604858	24	18238.71533
	18	466.5497	761.5562744	3.427364	14.85746	2.58948469	2.530667067	0.006249952	4.756842136	109.4074	6.872775555	6.707657337	0.027213022	20.7378445	476.9703979	24	18277.35059
	19	471.6538	769.8883057	3.416069	14.87736	2.59303784	2.541632891	0.006277037	4.834217548	116.0212	6.905651569	6.766124725	0.027450204	21.1342049	507.2208862	24	18477.31934
	20	475.4308	776.0542603	3.448501	14.8202	2.69805923	2.616004229	0.00646071	5.015184402	120.3644	6.928705215	6.724381924	0.02728085	21.1751328	508.2032166	24	18625.30225
	21	475.6048	776.336792	3.444495	14.82725	2.69939804	2.622490883	0.006476728	5.02903986	120.697	6.924889565	6.728163719	0.0272962	21.1921158	508.6108093	24	18632.08301
	22	328.2831	676.8778687	2.991131	13.70267	4.49983358	10.78844357	0.02664401	7.910707951	150.3035	6.541594505	7.439868927	0.030183578	20.0247154	380.4696045	18.46111	12495.91751
	23	481.9862	786.7540894	3.446848	14.8231	2.80671334	2.725637436	0.006731471	5.298943996	127.1747	7.323781013	7.110769272	0.02884843	22.6970119	544.7283325	24	18882.09814
	24	482.5714	787.7092285	3.469043	14.78397	2.66235542	2.567959547	0.006342053	4.996322632	119.9117	7.251919746	6.997658253	0.028389545	22.3721962	536.9326782	24	18905.02148
	25	475.9315	776.8705444	3.473304	14.77645	2.66680913	2.761863708	0.006820938	5.30059433	127.2143	6.855731487	6.605367184	0.026798025	20.8212051	499.7088928	24	18644.89307
	26	471.9754	770.4130249	3.471522	14.7796	2.80877924	2.708137989	0.00668825	5.154248714	123.702	6.718369007	6.476878643	0.026276737	20.2447414	485.8738098	24	18489.9126
	27	471.7964	770.121521	3.498868	14.73139	2.45583415	2.354775906	0.005815559	4.471689701	107.3205	7.356372356	7.026160717	0.028505171	21.9802799	527.5266724	24	18482.9165
	28	468.1733	764.206604	3.445831	14.82489	2.76140285	2.681548834	0.006622585	5.061824322	121.4838	6.619798183	6.429206848	0.026083337	19.9341717	478.420105	24	18340.9585
	29	471.816	770.1529541	3.455625	14.80763	2.82404304	2.735221624	0.006755141	5.203484058	124.8836	6.791183472	6.577433109	0.026684683	20.551466	493.235199	24	18483.6709
	30	474.7169	774.8884277	3.479726	14.76514	2.88652301	2.7760849	0.006856059	5.313746452	127.5299	6.820595264	6.559785843	0.026613109	20.622612	494.942688	24	18597.32227
Jul03	01	477.8185	779.9512329	3.469489	14.78318	2.23469925	3.119338036	0.007703786	6.008385181	144.2012	6.759385109	6.52085638	0.026455162	20.6366158	495.2788086	24	18718.82959
	02	473.8622	773.4937134	3.462493	14.79552	3.25997758	3.150891781	0.007781714	6.023397923	144.5616	6.682754993	6.459144592	0.026204791	20.2705498	486.4931946	24	18563.84912
	03	473.9178	773.5834351	3.460902	14.79832	3.21244121	3.105905771	0.007670611	5.934934139	142.4384	6.628223896	6.409967422	0.026005279	20.1189842	482.8555908	24	18566.00244

Unit 4 - CEMS Data

	04	472.2278	770.8255615	3.471523	14.7796	2.91609502	2.811589956	0.006943744	5.353688717	128.4885	6.680529594	6.440140247	0.026127683	20.1401539	483.3637085	24	18499.81348	
	05	472.2338	770.8344116	3.466943	14.78767	2.74772882	2.652539492	0.006550943	5.050596237	121.2143	6.852233887	6.614699364	0.026835889	20.6868668	496.4848022	24	18500.02588	
	06	473.0605	772.1842651	3.465354	14.79047	2.60957122	2.52031827	0.006224395	4.807583809	115.382	6.911535263	6.675328732	0.027081858	20.9145241	501.9486084	24	18532.42236	
	07	471.8568	770.2201538	3.468661	14.78465	3.02960825	2.922129631	0.007216744	5.559002399	133.4161	6.560814857	6.330422878	0.02568257	19.7819538	474.7669067	24	18485.28369	
	08	477.4505	779.3504028	3.456833	14.8055	3.34662366	3.239811182	0.008001317	6.237355232	149.6965	6.675920486	6.463174343	0.026221151	20.4368382	490.4841003	24	18704.40967	
	09	472.3492	771.0228882	3.447603	14.82177	3.46276617	3.360921383	0.008300424	6.399918556	147.1981	6.47711277	6.287533283	0.02550857	19.663969	452.2713013	24	18504.54932	
	10	471.7201	769.9959717	3.484241	14.75717	3.05536532	2.946215391	0.007276226	5.58894062	134.1346	6.931249142	6.645281315	0.02695995	20.7855663	498.8536072	24	18479.90332	
	11	469.3491	766.1259766	3.489966	14.74708	3.01387072	2.896165371	0.00715262	5.478287697	131.4789	6.712803841	6.430305481	0.026087787	19.9996376	479.9913025	24	18387.02344	
	12	466.3627	761.2513428	3.487105	14.75212	3.07444239	2.950291157	0.007286291	5.547684193	133.1444	6.339508057	6.084307194	0.024684059	18.790863	450.9807129	24	18270.03223	
	13	467.239	762.6819458	3.479917	14.7648	3.02293205	2.907088757	0.007179596	5.47687912	131.4451	6.383229256	6.138615131	0.024904408	18.9937286	455.8494873	24	18304.3667	
	14	466.8654	762.0720215	3.500522	14.72847	2.57316422	2.466995001	0.006092706	4.637991905	111.3118	6.983396053	6.66613245	0.027044555	20.6263866	495.0332947	24	18289.72852	
	15	462.6817	755.2423096	3.497597	14.73365	2.71211672	2.598488808	0.00641745	4.844135284	116.2593	6.760499477	6.463116646	0.026220912	19.8156548	475.5756836	24	18125.81543	
	16	464.0992	757.5561523	3.498424	14.73217	2.58906388	2.481315374	0.006128072	4.634848118	111.2364	6.970200062	6.659235954	0.027016561	20.488863	491.7326965	24	18181.34766	
	17	462.2749	754.5787354	3.497978	14.73296	2.99622297	2.872014284	0.007092972	5.343626976	128.2471	6.811215878	6.508000851	0.026403001	19.940979	478.5834961	24	18109.88965	
	18	462.5797	755.0764771	3.489837	14.74731	3.14487171	3.017710447	0.007452796	5.619437695	134.8665	6.636332512	6.359445572	0.025800312	19.4979839	467.9515991	24	18121.83545	
	19	341.6898	669.2946167	3.056496	13.68255	6.02188969	12.60954857	0.031141568	7.799708366	155.9942	6.864890575	7.045368671	0.02858308	19.9107437	398.2148743	19.36111	12958.28716	
	20	468.5024	764.7446289	3.457788	14.80382	3.08652616	2.987849951	0.007379054	5.64195919	135.407	6.570512772	6.358877659	0.025798012	19.7314835	473.555603	24	18353.87109	
	21	470.6076	768.1798096	3.476547	14.77075	2.82229376	2.72177887	0.00672194	5.158845901	123.8123	7.169883251	6.894164562	0.027969675	21.5023422	516.0562134	24	18436.31543	
	22	465.4341	759.7357178	3.460395	14.79922	3.11927629	3.018241644	0.007454113	5.657577991	135.7819	6.621228218	6.401806355	0.025972188	19.7487831	473.9707947	24	18233.65723	
	23	468.2773	764.3770752	3.455349	14.80813	2.91010666	2.821573734	0.006968402	5.312334061	127.496	7.067763805	6.840017319	0.027749991	21.2523785	510.0570984	24	18345.0498	
	24	467.6758	763.3948364	3.476675	14.77052	2.7801621	2.680275917	0.006619439	5.049953938	121.1989	7.047464848	6.777754307	0.027497396	21.0030289	504.0726929	24	18321.47607	
	25	469.0492	765.637207	3.486022	14.75403	2.85885954	2.745819092	0.006781311	5.189223766	124.5414	6.889117241	6.610984325	0.026820805	20.5445957	493.0703125	24	18375.29297	
	26	466.8682	762.0764771	3.484495	14.75672	3.15743303	3.032654285	0.0074897	5.705642223	136.9354	6.451910019	6.196456909	0.025139067	19.171463	460.1151123	24	18289.83545	
	27	463.8656	757.1749878	3.470186	14.78196	3.27476335	3.157399893	0.007797787	5.904809952	141.7154	6.268443108	6.046478271	0.024530608	18.5740509	445.7771912	24	18172.19971	
	28	464.5108	758.2288208	3.459312	14.80113	3.17587495	3.072106361	0.007587139	5.753306866	138.0794	6.321066856	6.115350246	0.024810016	18.8122826	451.494812	24	18197.4917	
	29	465.5054	759.8522949	3.465228	14.7907	3.07507873	2.97303462	0.007342461	5.570823669	133.6998	6.722500801	6.488744736	0.026324892	20.0240955	480.5783081	24	18236.45508	
	30	466.0027	760.6639404	3.495308	14.73767	3.34121823	3.206442595	0.007918908	6.006531239	144.1568	6.643010139	6.351686001	0.025768837	19.6352119	471.2451172	24	18255.93457	
	31	469.6817	766.6685181	3.491555	14.74428	3.38001156	3.247137547	0.008019412	6.137987614	147.3117	6.676555157	6.392400742	0.02593402	19.9043331	477.70401	24	18400.04443	
Aug03	01	466.308	761.1617432	3.513685	14.70527	3.31530595	3.166896582	0.007821241	5.940773964	142.5786	6.522500038	6.202788353	0.025164749	19.1792831	460.3027954	24	18267.88184	
	02	466.9567	762.2200928	3.482462	14.76033	3.52611804	3.388637543	0.008368874	6.380851269	153.1404	6.100395679	5.863247395	0.023787245	18.1363964	435.2734985	24	18293.28223	
	03	465.5108	759.8612671	3.491173	14.74496	3.39988494	3.258398771	0.008047222	6.115234852	146.7656	6.063510418	5.81275177	0.023582378	17.9201126	430.0827026	24	18236.67041	
	04	471.1097	769.0004272	3.521127	14.69215	2.48302031	2.370089054	0.005853377	4.485389709	107.6494	7.253351212	6.879725933	0.027911087	21.5126953	516.3046875	24	18456.01025	
	05	470.5797	768.1349487	3.490602	14.74597	2.86442423	2.745957136	0.006781651	5.210358143	125.0486	6.47957325	6.213602543	0.02520862	19.3675175	464.8204041	24	18435.23877	
	06	468.7688	765.1796265	3.47979	14.76503	2.92388368	2.811644077	0.006943879	5.314144611	127.5395	6.38418293	6.139930248	0.024909733	19.0611458	457.4674988	24	18364.31104	
	07	469.7915	766.8479004	3.500268	14.72892	2.60098624	2.49323678	0.006157513	4.71694231	113.2066	6.864157677	6.5541749	0.026590325	20.4090462	489.8171082	24	18404.34961	
	08	470.1371	767.4130859	3.497978	14.73296	2.63198876	2.522879601	0.006230721	4.774234295	114.5816	6.813282967	6.510896683	0.026414737	20.2905045	486.9721069	24	18417.91406	
	09	465.5391	759.906189	3.483734	14.75807	2.89542675	2.781305313	0.006866953	5.22078228	125.2988	6.293719769	6.046382904	0.024530225	18.6413536	447.3924866	24	18237.74854	
	10	465.2363	759.4127197	3.489329	14.74821	2.89733505	2.778497458	0.006862017	5.21164608	125.0795	6.295470238	6.038131714	0.024496751	18.6041374	446.4992981	24	18225.90527	
	11	469.539	766.4353027	3.474385	14.77455	3.23167872	3.112257957	0.007686301	5.892706871	141.425	6.315660477	6.083641052	0.024681371	18.9161243	453.9869995	24	18394.44727	
	12	467.9149	763.7850342	3.486278	14.75359	2.84200716	2.729707956	0.006741523	5.151470184	123.6353	6.496108055	6.23692131	0.025303237	19.3291416	463.8993835	24	18330.84082	
	13	468.8296	765.2784424	3.493463	14.74093	2.64518428	2.537550926	0.006266954	4.790774345	114.9786	6.818051815	6.525451183	0.026473803	20.2742214	486.5812988	24	18366.68262	
	14	465.7284	760.2154541	3.466118	14.78914	2.91084743	2.810371637	0.006940736	5.277518272	126.6604	6.397537231	6.177302361	0.025051354	19.0529003	457.2695923	24	18245.1709	
	15	467.5556	763.1975708	3.470377	14.78162	2.80830288	2.707988739	0.006687884	5.104737282	122.5137	6.492928028	6.261827946	0.025404274	19.3890419	465.3370056	24	18316.7417	
	16	311.8958	678.6165283	2.921887	13.82363	5.08362198	17.11680984	0.042273141	7.738144875	139.2866	6.026082993	7.299360752	0.029513556	18.7238293	337.0289307	17.89167	12145.15888	
	17	467.4117	762.9644775	3.453526	14.81133	3.12277365	3.02569747	0.007472523	5.702477455	136.8595	6.86399889	6.651846886	0.026986584	20.5902786	494.166687	24	18311.14746	
	18	465.5304	759.8925781	3.453272	14.81177	3.12468195	3.027866364	0.007477879	5.683705807	136.4089	6.784346104	6.57470417	0.02667363	20.2715454	486.5170898	24	18237.42188	
	19	467.2418	762.6865234	3.480109	14.76447	2.76076627	2.658183336	0.006564879	5.000477314	120.0115	7.217738152	6.936573605	0.02814173	21.4790802	515.4979248	24	18304.47656	
	20	469.0548	765.6461182	3.485534	14.7549	2.39266419	2.29757452	0.00567429	4.341232777	104.1896	7.665650845	7.359621525	0.029858029	22.8674622	548.8190918	24	18375.50684	
	21	466.1787	760.9509888	3.508027	14.71525	2.27809	2.178030491	0.005379054	4.083292007	97.99901	7.612814426	7.257279873	0.02944283	22.4263458	538.2322998	24	18262.82373	
	22	464.4229	758.0854492	3.494035	14.73991	3.03056288	2.902492046	0.007168247	5.435391903	130.4494	6.516934395	6.243922234	0.025331637	19.2075291	460.9807129	24	18194.05078	
	23	462.9558	755.6906738	3.492953	14.74182	3.01975203	2.893378019	0.007145734	5.401079655	129.6259	6.451751232	6.181893349	0.025079995	18.9546413	454.9114075	24	18136.57617	
	24	461.1839	752.7984009	3.500712	14.72813	3.20544624	3.064301729	0.007567864	5.698213577	136.7571	6.300557613	6.02358532	0.024437726	18.3976116	441.5426941	24	18067.16162	
	25	462.4918	754.9328613	3.505926	14.71895	2.84248447	2.721018314	0.00672006	5.058597088	121.4063	6.844443321	6.525103569	0.026472395	20.013567	480.325592	24	18118.38867	
	26	461.4095	753.1660767	3.409508	14.88894	3.08869314	3.036097288	0.007498206	5.641183853	124.106	6.723311424	6.602898121	0.026788009	20.2080269	444.5765991	24	18075.98584	
	27	465.1679	759.3007202	3.434066	14.84564	3.54153872	3.460274935	0.008545794	6.480273724	155.5266	6.590703487	6.417106628	0.026034245	19.7817631	474.7622986	24	18223.21729	
	28	468.0254	763.9643555	3.454353	14.80986	3.83041501	3.710607052	0.009164036	7.001864433	168.0447	6.439668655	6.239049911	0.025311863	19.3370285	464.0887146	24	18335.14453	
	29	470.517	768.0317993	3.460266	14.79945	3.71101665	3.588874102	0.008863393	6.80877018	163.4105	6.543803215	6.328953266	0.025676617	19.7198372	473.2760925	24	18432.76318	
	30	468.538	764.8029785	3.45467	14.80931	3.6900301	3.57459712	0.008828131	6.752390385	162.0574	6.479574203	6.277516365	0.025467934	19.4819088	467.5657959	24	18355.27148	
	31	464.7281	758.5831909	3.450727	14.81626	3.66109705	3.550420046	0.008768424	6.652860165	159.6686	6.39547205	6.2026577	0.025164224	19.0896759	458.1521912	24	18205.99658	
Sep03	01	462.8406	755.5023193	3.445704	14.82514	3.60258961	3.498717546	0.008640734	6.529163837	156.6999	6.377505302	6.194485188	0.025131071	18.9871082	455.6906128	24	18132.05566	
	02	461.8598	753.9014893	3.472986	14.77702	3.16570044	3.055299282	0.007545631	5.681350231	136.3524	6.775284767	6.523138046	0.026464429	19.966383	479.1932068	24	18093.63574	
	03	459.7225	750.4127197	3.469361	14.78342	3.14916539	3.043919563	0.007517526	5.629294395	135.1031	6.701198101	6.457588673	0.026198478	19.6803455	472.3283081	24	18009.90527	

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	04	460.7993	752.1705322	3.439706	14.83569	3.14413357	3.063123465	0.007564955	5.681556225	130.6758	6.722364902	6.536962032	0.026520509	19.9581356	459.0371094	24	18052.09277
	05	463.8159	757.0944214	3.455243	14.8083	3.22436428	3.13117218	0.007733011	5.850385666	140.4093	6.713439465	6.496273994	0.026355429	19.9657841	479.1788025	24	18170.26611
	06	461.8542	753.8924561	3.471841	14.77904	3.7520349	3.616462469	0.008931528	6.733931541	161.6144	6.225040913	6.000708103	0.024344908	18.3541546	440.4996948	24	18093.41895
	07	462.9645	755.7041626	3.478583	14.76715	3.23104286	3.108188868	0.007676249	5.802805424	139.2673	6.40230751	6.159687519	0.024989896	18.886301	453.2712097	24	18136.8999
	08	467.269	762.7313232	3.467071	14.78745	3.06565254	2.959899664	0.007310024	5.577670574	133.8641	6.70024395	6.467679501	0.026239425	20.0143757	480.3450012	24	18305.55176
	09	471.7939	770.1170654	3.470887	14.78072	2.88175416	2.778326273	0.006861594	5.284831524	126.836	6.942219734	6.693819523	0.027156884	20.9141083	501.9385986	24	18482.80957
	10	466.3872	761.291748	3.398527	14.9083	2.8860085	2.845563412	0.007027645	5.344395161	112.2323	6.811927319	6.704781532	0.027201347	20.7156715	435.0290833	23.93889	18224.47831
	11	463.2503	756.1705322	3.382046	14.93735	3.2447679	3.211399078	0.007931148	5.997992039	143.9518	6.42498827	6.359091282	0.025798883	19.5078583	468.1885986	24	18148.09277
	12	464.1872	757.6998291	3.371378	14.95617	2.77479219	2.755602598	0.006805476	5.149534225	118.4393	7.063393116	7.010791779	0.028442826	21.5659256	496.0162964	24	18184.7959
	13	460.3874	751.4979858	3.416959	14.8758	2.9383533	2.878275394	0.007108437	5.342298985	128.2152	6.650165081	6.519449711	0.026449449	19.8818665	477.1647949	24	18035.95166
	14	352.8957	658.3283691	3.003155	14.11249	3.25273252	4.094461918	0.010112029	5.837379932	122.585	6.535262108	8.940812111	0.036272932	19.5085087	409.6787109	20.25	13331.14948
	15	467.5359	763.1662598	3.432455	14.84848	3.26040244	3.178923368	0.007850943	5.991938114	143.8065	6.968822479	6.795179367	0.0275681	21.0392132	504.9411011	24	18315.99023
	16	471.0055	768.8299561	3.430822	14.85135	3.08859253	3.034082413	0.007493232	5.765775204	138.3786	7.099135876	6.9233675	0.028088158	21.5932999	518.2391968	24	18451.91895
	17	476.8849	778.4266357	2.649966	16.22803	2.60607505	3.97506237	0.009817168	7.657258987	168.4597	5.470513821	6.947962284	0.028187936	21.9170856	482.1759033	24	18682.23926
	18	472.7639	771.6999512	3.484495	14.75673	3.07078624	2.948877811	0.007282804	5.622011185	134.9283	7.053507328	6.775184155	0.027486971	21.2142963	509.1430969	24	18520.79883
	19	470.4154	767.8658447	3.473303	14.77647	3.08716202	2.974312067	0.007345617	5.641861439	135.4047	6.992139816	6.73707819	0.027332371	20.9893742	503.7449951	24	18428.78027
	20	469.8516	766.9465332	3.465672	14.78992	3.03596878	2.931589127	0.007240104	5.553251743	133.278	6.972267628	6.733105659	0.027316259	20.953867	502.8927917	24	18406.7168
	21	466.6648	761.7446899	3.461475	14.7973	3.03278923	2.931996584	0.007241115	5.516160965	132.3879	6.936018467	6.705565929	0.027204528	20.7261543	497.4277039	24	18281.87256
	22	465.9233	760.5339355	3.37963	14.94161	2.98758459	2.961055517	0.007312876	5.559756756	133.4342	6.936547279	6.868151665	0.027864134	21.1921425	508.6113892	24	18252.81445
	23	467.0877	762.4352417	3.403032	14.90036	3.16506338	3.112169504	0.00766608	5.859995365	140.6399	6.926002026	6.812129974	0.027636854	21.074213	505.7810974	24	18298.4458
	24	469.1617	765.8209229	3.45715	14.80494	3.61244678	3.496682167	0.008635705	6.613645554	158.7275	6.71789217	6.503101826	0.026383134	20.2085915	485.0061951	24	18379.70215
	25	469.6898	766.6818848	3.465291	14.79059	3.70990372	3.582596302	0.008847886	6.784358978	162.8246	6.588319778	6.362543106	0.025812875	19.7907867	474.9789124	24	18400.36523
	26	469.8545	766.9511108	3.480617	14.76356	3.46761131	3.341555357	0.008252595	6.323933601	151.7744	6.919007301	6.64574194	0.02696182	20.6903629	496.5686951	24	18406.82666
	27	465.5547	759.9329834	3.455688	14.80752	3.76872802	3.648873329	0.009011573	6.851009369	164.4242	6.438395977	6.23490572	0.025295062	19.2243118	461.3834839	24	18238.3916
	28	461.8878	753.9464111	3.459249	14.80125	3.31657672	3.208229065	0.007923318	5.979179859	143.5003	6.50628376	6.294307709	0.025536049	19.2544174	462.1060181	24	18094.71387
	29	463.7859	757.045105	3.475785	14.77208	2.81498003	2.710276365	0.006693533	5.068154335	121.6357	6.7506423	6.499903679	0.026370158	19.9633331	479.1199951	24	18169.08252
	30	468.2196	764.2828979	3.488057	14.75044	2.74836493	2.642436743	0.006525987	4.981771469	119.5625	7.195540087	6.897139549	0.027981738	21.3994007	513.5856323	24	18342.78955
Oct03	01	467.9922	763.9106445	3.457023	14.80516	3.08636594	2.987455845	0.007378078	5.636497498	135.2759	6.760340214	6.544455528	0.026550896	20.2827168	486.7851868	24	18333.85547
	02	469.3656	766.15271	3.463446	14.79384	2.86108637	2.765059948	0.006828831	5.232460976	125.5791	6.965747833	6.730835915	0.027307041	20.921217	502.1091919	24	18387.66504
	03	469.2881	766.0272217	3.489138	14.74855	2.77173662	2.658707857	0.006566179	5.031284332	120.7508	7.014080524	6.727926731	0.027295234	20.9127121	501.9050903	24	18384.65332
	04	466.0133	760.6818848	3.49448	14.73912	2.72849298	2.612804651	0.006452809	4.910347939	117.8484	6.874173641	6.583154202	0.026707901	20.3182507	487.6380005	24	18256.36523
	05	464.4976	758.2064209	3.50262	14.72478	2.66187787	2.542967558	0.006280331	4.762424946	114.2982	6.839514256	6.534691811	0.026511284	20.1014423	482.4346008	24	18196.9541
	06	464.036	757.453064	3.484115	14.7574	2.70305586	2.595907211	0.006411073	4.857269764	116.5745	6.825365067	6.55592823	0.026597453	20.1466503	483.5195923	24	18178.87354
	07	462.821	755.4710693	3.475466	14.77265	2.59971499	2.503066301	0.006181788	4.671090126	112.1062	6.843966484	6.590681553	0.026738442	20.200613	484.8146973	24	18131.30566
	08	464.184	757.6953125	3.478836	14.76671	2.67862511	2.576674223	0.006363578	4.82187891	115.7251	6.873961449	6.612499237	0.026826959	20.3273907	487.8573914	24	18184.6875
	09	465.239	759.4172363	3.483987	14.75762	2.57475376	2.473024607	0.006107596	4.638315678	111.3196	6.949373722	6.675178528	0.027081255	20.5672283	493.6134949	24	18226.01367
	10	476.0442	777.0543213	3.48208	14.76098	2.54454708	2.445298672	0.006039122	4.693481445	112.6436	7.306770802	7.022376537	0.02848983	22.1388035	531.3312988	24	18649.30371
	11	475.8544	776.744873	3.492128	14.74328	2.65822291	2.547152042	0.00629067	4.887050629	117.2892	7.193573952	6.894001484	0.027969021	21.7306252	521.5349731	24	18641.87695
	12	473.9917	773.7045288	3.487041	14.75225	2.72992373	2.619815111	0.006470118	5.007188797	120.1725	7.062729836	6.778283119	0.027499538	21.2777462	510.6658936	24	18568.90869
	13	475.9315	776.8705444	3.47553	14.77254	2.7405746	2.638729572	0.006516836	5.063302994	121.5193	7.145560265	6.880378723	0.027913742	21.6859798	520.463501	24	18644.89307
	14	476.5548	777.8884277	3.471588	14.77949	3.01577711	2.907049894	0.007179501	5.583888054	134.0133	7.092458725	6.836897373	0.027737342	21.5810871	517.946106	24	18669.32227
	15	475.3319	775.8929443	3.388875	14.92531	3.21624351	3.175951242	0.007843606	6.082071781	139.8876	6.910269737	6.823506355	0.027683012	21.4638386	493.6683044	24	18621.43066
	16	478.1455	780.4848633	3.432159	14.849	3.44710255	3.361847878	0.008302708	6.481282711	155.5508	6.873060226	6.702636242	0.02719265	21.2244415	509.3865967	24	18731.63672
	17	476.0302	777.0319824	3.435464	14.84316	3.47524285	3.384747505	0.008359265	6.49772644	155.9454	6.827750206	6.650732517	0.026982071	20.9685249	503.2445984	24	18648.76758
	18	469.5878	766.5159912	3.435847	14.8425	2.959337	2.881510019	0.007116427	5.46086359	131.0607	6.829656601	6.651928425	0.026986925	20.6899662	496.5592041	24	18396.38379
	19	468.3766	764.5383301	3.468024	14.78577	2.85552049	2.754947424	0.006803857	5.20331049	124.8794	6.690863609	6.456605434	0.026194492	20.0279617	480.6711121	24	18348.91992
	20	467.0084	762.3053589	3.46103	14.7981	2.90639639	2.809977531	0.006939761	5.29197979	127.0075	6.674011707	6.452913284	0.026179513	19.9598198	479.0357056	24	18295.32861
	21	466.7285	761.8479004	3.435525	14.84306	3.13064051	3.051430464	0.007536074	5.736957073	131.95	6.60004282	6.428431988	0.026080195	19.8600311	456.7807007	24	18284.34961
	22	468.3051	764.421936	3.445513	14.82546	3.45489216	3.355243444	0.008286398	6.335228443	152.0455	6.580369949	6.391003609	0.025928346	19.8217545	475.7221069	24	18346.12646
	23	472.0383	770.5162354	3.468724	14.78453	3.56141281	3.435602427	0.00848486	6.538831234	156.9319	6.63744545	6.403725147	0.025979949	20.0179996	480.4320068	24	18492.38965
	24	469.8932	767.013855	3.474704	14.774	3.40974092	3.283917904	0.008110246	6.22292614	149.3502	6.613279343	6.369614601	0.025841566	19.8237381	475.7697144	24	18408.33252
	25	470.8296	768.5430298	3.461539	14.79722	3.7194438	3.596160412	0.008881387	6.826224804	163.8294	6.495314121	6.279254913	0.025474988	19.5798454	469.9162903	24	18445.03271
	26	375.4365	668.494812	2.948718	13.0898	4.20048857	4.225986481	0.010436863	7.557792664	166.2714	6.134663582	6.604838848	0.026795899	18.8352451	414.3753967	20.75278	13873.12383
	27	478.8405	781.6195679	3.437437	14.8397	4.29353571	4.178965569	0.010320732	8.06962204	193.6709	6.792295933	6.612473965	0.026826859	20.973238	503.3576965	24	18758.86963
	28	478.1353	780.46698	3.431585	14.85	3.99639368	3.896366596	0.009622807	7.512541294	180.301	6.977990627	6.804837704	0.027607271	21.5490627	517.1774902	24	18731.20752
	29	478.1565	780.5029297	3.415983	14.87753	3.63592291	3.560044527	0.008792195	6.863955975	164.7349	7.20305872	7.057149887	0.028630912	22.3485794	536.3659058	24	18732.07031
	30	490.4476	800.5661011	3.458486	14.80259	3.69877529	3.57890749	0.008838777	7.076293945	169.8311	7.548108101	7.303553581	0.029630566	23.72295	569.3508301	24	19213.58643
	31	489.6124	799.2027588	3.449902	14.81772	3.61085749	3.50175786	0.008648243	6.914031506	165.9368	7.578315735	7.352039814	0.029827267	23.8380756	572.1138306	24	19180.86621
Nov03	01	490.7743	801.0996094	3.445958	14.82467	3.93693423	3.822467566	0.009440294	7.565462589	181.5711	7.323622227	7.112447262	0.028855255	23.1154537	554.770874	24	19226.39063
	02	489.7528	799.4315186	3.428723	14.85505	3.83661413	3.744256973	0.009247141	7.393506527	177.4442	7.419331074	7.241654396	0.029379442	23.486845	563.6843262	24	19186.35645
	03	490.6757	800.9382324	3.44138	14.83274	3.79066658	3.68559885	0.009102269	7.291472435	174.9953	7.462098122	7.256724834	0.029440587	23.5808582	565.9406128	24	19222.51758
	04	492.3594	803.6871948	3.435019	14.84395	3.67286038	3.577954054	0.008836428	7.102881908	170.4692	7.515675068	7.322090626	0.02970578	23.8762341	573.0296021	24	19288.49268

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	05	490.7473	801.0548096	3.417743	14.87441	3.76528335	3.585804129	0.009102779	7.297895432	175.1495	7.428128719	7.273191452	0.02950738	23.6365051	567.276123	24	19225.31543	
	06	487.662	796.0188599	3.437628	14.83935	3.93089294	3.826395273	0.009449995	7.524727821	180.5935	7.255895615	7.064186573	0.02865945	22.813921	547.5341187	24	19104.45264	
	07	487.0226	794.973999	3.453207	14.81188	4.12612581	3.998198748	0.009874295	7.853477478	188.4835	7.094844341	6.875775814	0.02789508	22.1766167	532.2388306	24	19079.37598	
	08	484.9446	791.5838623	3.451808	14.81435	4.34441185	4.211509228	0.010401104	8.232803345	197.5873	6.86988163	6.660265923	0.027020741	21.393446	513.442688	24	18998.0127	
	09	480.3351	784.0588989	3.465673	14.78991	4.00466156	3.867381334	0.009551222	7.49446106	179.8671	6.771468163	6.538675308	0.026527459	20.7983952	499.161499	24	18817.41357	
	10	485.4807	792.458313	3.459504	14.8008	4.35633469	4.213929653	0.010407087	8.247897148	197.9495	6.826159954	6.603199005	0.026789233	21.2297459	509.513916	24	19018.99951	
	11	484.2828	790.5029907	3.450028	14.81749	4.41500044	4.281678677	0.0105744	8.361387253	200.6733	6.782597542	6.579163551	0.02669172	21.0999126	506.3978882	24	18972.07178	
	12	481.9563	786.7047729	3.435761	14.84265	3.99125338	3.887214899	0.009600194	7.554123878	181.299	6.885673523	6.706986904	0.027210291	21.4069633	513.7670898	24	18880.91455	
	13	486.8105	794.6287231	3.447357	14.8222	4.29671669	4.16994524	0.010298465	8.185534477	196.4528	6.943012714	6.740229607	0.027345154	21.7296085	521.5106201	24	19071.08936	
	14	486.052	793.3909912	3.445514	14.82546	4.07413816	3.956189632	0.009770542	7.753723621	186.0894	6.984508514	6.784163952	0.0275234	21.8366451	524.0795288	24	19041.38379	
	15	485.2091	792.0142822	3.444687	14.82691	3.74154162	3.63457036	0.008976248	7.110300541	170.6472	7.051759243	6.850914478	0.027794212	22.0132465	528.3178711	24	19008.34277	
	16	487.9341	796.4627686	3.456007	14.80696	3.9967134	3.86972332	0.009557002	7.612663269	182.7039	7.074492455	6.850458145	0.027792349	22.1357002	531.2567749	24	19115.10645	
	17	489.5163	799.0457764	3.451109	14.81559	4.2277174	4.09984827	0.010125348	8.08976078	194.1543	7.04269743	6.828924656	0.027705004	22.139925	531.3582153	24	19177.09863	
	18	485.9942	793.296814	3.441252	14.83297	4.15919399	4.04458189	0.009988843	7.92317009	190.1561	6.968768597	6.776785851	0.027493462	21.8128204	523.5076904	24	19039.12354	
	19	481.2476	785.5478516	3.430314	14.85225	3.9089005	3.812905788	0.009416682	7.397748947	177.546	6.929977417	6.760590553	0.027427766	21.5482368	517.1577148	24	18853.14844	
	20	479.8463	783.2607422	3.446912	14.82298	3.6727016	3.565347195	0.008805288	6.899189949	165.5808	7.046989441	6.842420101	0.027759729	21.7453175	521.8876343	24	18798.25781	
	21	483.8958	789.8707275	3.459633	14.80057	3.46951962	3.355141163	0.008286146	6.545376301	157.089	7.377835751	7.13691473	0.028954517	22.8727493	548.9459839	24	18956.89746	
	22	493.5386	805.6109619	3.455497	14.80786	3.05886292	2.961433411	0.00731381	5.896604061	141.5185	7.825854778	7.578649998	0.030746637	24.7736702	594.5681152	24	19334.66309	
	23	493.9284	806.2477417	3.443287	14.82938	3.10862541	3.020074129	0.007458633	6.017956257	144.431	7.774661064	7.555692196	0.030653492	24.7178383	593.2280884	24	19349.9458	
	24	489.0463	798.2789307	3.42332	14.86459	3.12197995	3.051713228	0.007536774	6.019571781	144.4697	7.805981636	7.630953312	0.030958842	24.7162666	593.1903687	24	19158.69434	
	25	490.2667	800.2700195	3.430124	14.85259	3.06871915	2.993242025	0.007392369	5.918848515	142.0524	7.927445889	7.733930588	0.031376611	25.1131077	602.7145996	24	19206.48047	
	26	490.9342	801.3596802	3.443033	14.82983	3.39702177	3.301496267	0.008153656	6.534907818	156.8378	7.708047867	7.491117954	0.030391509	24.3606491	584.6555786	24	19232.63232	
	27	485.9836	793.2788086	3.428024	14.85629	3.68319368	3.592762947	0.008872998	7.048921585	169.1741	7.429187775	7.252859592	0.029424908	23.3437214	560.2493286	24	19038.69141	
	28	484.544	790.9290771	3.410028	14.88803	3.6362946	3.56542635	0.008805483	6.976194382	167.4287	7.434117317	7.296448231	0.029601742	23.4089451	561.8146973	24	18982.29785	
	29	484.1732	790.3237305	3.422619	14.86582	3.42786574	3.350853682	0.008275557	6.545048714	157.0812	7.631576061	7.462325096	0.030274704	23.9279461	574.2706909	24	18967.76953	
	30	485.2771	792.1263428	3.434065	14.84563	3.77349782	3.677320004	0.009081827	7.193472385	172.6433	7.558601856	7.365766048	0.029882962	23.6730785	568.1539307	24	19011.03223	
Dec03	01	487.3242	795.4672852	3.449328	14.81873	4.14520454	4.02126503	0.009931253	7.899312496	189.5835	7.428553104	7.207435131	0.029240616	23.2624207	558.2980957	24	19091.21484	
	02	484.2282	790.413269	3.415605	14.87819	4.39433241	4.309258461	0.010642512	8.402334213	176.449	7.135588646	6.990512371	0.028360562	22.3963184	470.3226929	24	18969.91846	
	03	486.4064	793.9693604	3.393321	14.91747	4.31232405	4.252568245	0.010502512	8.340680122	191.8356	7.290338993	7.190143585	0.029170452	23.1643047	532.7789917	24	19055.26465	
	04	482.9722	788.3639526	3.433621	14.84642	4.26825857	4.159116745	0.010271718	8.098527908	194.3647	7.213765144	7.031803608	0.028528079	22.4927883	539.8269043	24	18920.73486	
	05	479.7013	783.0230713	3.451555	14.8148	4.2940135	4.162337303	0.010279656	8.05045414	193.2109	7.211221218	6.992572308	0.028368909	22.2169666	533.2072144	24	18792.55371	
	06	476.7771	778.251709	3.457468	14.80437	4.3638072	4.223204613	0.010429988	8.120071411	194.8817	7.045399666	6.818954945	0.027664538	21.5324669	516.7791748	24	18678.04102	
	07	476.8382	778.3503418	3.464272	14.79238	4.14870167	4.007270336	0.0098967	7.70273304	184.8656	7.025209427	6.786400795	0.027532479	21.4332199	514.3972778	24	18680.4082	
	08	487.8432	796.3149414	3.45238	14.81335	3.79082751	3.673990488	0.009073604	7.228124619	173.475	7.524896145	7.294007778	0.029591842	23.5657005	565.5767822	24	19111.55859	
	09	484.8105	791.3640747	3.455498	14.80786	3.33597136	3.230228424	0.007977653	6.313934803	151.5344	7.60073185	7.361257076	0.029864654	23.6415215	567.3964844	24	18992.73779	
	10	479.344	782.4401245	3.445959	14.82466	3.22722745	3.134240389	0.00774059	6.058113575	145.3947	7.407248497	7.193481445	0.029184004	22.8348331	548.0360107	24	18778.56299	
	11	485.775	792.9381104	3.458549	14.80247	3.30544782	3.198731661	0.007899865	6.26652813	150.3967	7.565597534	7.320334435	0.029698655	23.5507755	565.2186279	24	19030.51465	
	12	489.9807	799.8036499	3.458232	14.80303	3.56427455	3.44925046	0.008518567	6.816897869	163.6055	7.656854153	7.409105301	0.030058792	24.0445576	577.069397	24	19195.2876	
	13	483.9149	789.9020996	3.445068	14.82624	3.19956326	3.10811615	0.007676072	6.06242609	145.4982	7.541113377	7.325127125	0.029718101	23.4786167	563.4868164	24	18957.65039	
	14	481.7029	786.2922974	3.442206	14.83129	2.95329714	2.870878696	0.007090172	5.576070786	133.8257	7.494372368	7.286032677	0.029559491	23.2452049	557.8848877	24	18871.01514	
	15	353.5659	692.5578003	2.995421	14.05148	4.50530624	8.33398056	0.020582331	7.81803894	156.3608	7.37961483	9.836783409	0.039907891	22.887228	457.7445374	19.24722	13329.81435	
	16	494.4999	807.1804199	3.436546	14.84127	3.17426589	3.090839624	0.007633406	6.162801266	147.9072	7.754469872	7.551335812	0.030635824	24.7297001	593.5128174	24	19372.33008	
	17	493.4313	805.4359741	3.427898	14.85651	3.19527173	3.118755102	0.007702347	6.206382751	148.9532	7.787697792	7.602381706	0.030842917	24.8461075	596.3065796	24	19330.46338	
	18	488.4424	797.2924805	3.454161	14.81021	3.17714763	3.077756643	0.007601094	6.061753273	145.4821	7.650018692	7.412214756	0.030071404	23.9814587	575.5549927	24	19135.01953	
	19	483.3709	789.0142822	3.448566	14.82008	3.0475738	2.956167936	0.007300804	5.763216972	138.3172	7.647791862	7.422555923	0.030113362	23.7576046	570.1824951	24	18936.34277	
	20	480.3572	784.0947876	3.468217	14.78543	3.14884758	3.037928343	0.007502731	5.86363266	141.2072	7.367980003	7.109911919	0.028844958	22.6177082	542.8250122	24	18818.2749	
	21	482.555	787.682373	3.470697	14.78107	3.45044041	3.326596975	0.008215646	6.472066879	155.3296	7.26416254	7.004528522	0.028417429	22.3834877	537.2036743	24	18904.37695	
	22	483.0439	788.4807739	3.454797	14.80908	3.32452488	3.220174074	0.007952817	6.270576954	150.4939	7.374973774	7.144389629	0.02898483	22.8542538	548.5020752	24	18923.53857	
	23	481.0249	785.1846313	3.433621	14.84643	3.0534575	2.975799084	0.00734929	5.770731449	138.4975	7.501844406	7.311830997	0.029664138	23.2920494	559.0092163	24	18844.43115	
	24	479.6347	782.9154053	3.42618	14.85954	3.81880879	3.728509903	0.009208254	7.208221436	172.9973	7.275609016	7.107369423	0.028834641	22.5772953	541.8551025	24	18789.96973	
	25	485.1892	791.9829712	3.441442	14.83263	3.77874494	3.674902916	0.00907586	7.183204174	172.3969	7.415832996	7.210701466	0.029253876	23.178854	556.2924805	24	19007.59131	
	26	496.1977	809.9519653	3.44831	14.82052	3.70783782	3.599053383	0.008888533	7.201317787	172.8316	7.797397614	7.567104816	0.030699801	24.8658009	596.7791748	24	19438.84717	
	27	493.9839	806.3375244	3.435339	14.8434	6.24777079	6.075012207	0.015003367	12.01692009	288.4061	7.455580235	7.264163971	0.029470759	23.7800503	570.7211914	24	19352.10059	
	28	494.283	806.8262329	3.411999	14.88454	5.51453543	5.399036884	0.013333932	10.67640018	256.2336	7.500889778	7.357724667	0.029850345	24.1021957	578.4526978	24	19363.82959	
	29	486.1652	793.5747681	3.389995	14.92333	3.75330639	3.702308416	0.009143542	7.262750149	174.306	7.645725727	7.548129559	0.030622821	24.3022575	583.2542114	24	19045.79443	
	30	482.0578	786.8706055	3.395825	14.91305	3.32632756	3.276456118	0.008091818	6.373408794	152.9618	7.589921474	7.480804443	0.030349679	23.8764839	573.0355835	24	18884.89453	
	31	490.0909	799.9830933	3.439662	14.83577	3.6304143	3.726025105	0.009202113	7.363211155	176.7171	7.586900711	7.381711483	0.029947653	23.9588585	575.0125732	24	19199.59424	
Jan04	01	486.3217	793.8303833	3.415496	14.87838	3.64122415	3.567209244	0.008809884	6.995191574	167.8846	7.557330132	7.405026436	0.030042242	23.8490868	572.3781128	24	19051.9292	
	02	485.1293	791.8841553	3.420266	14.86997	3.69400597	3.614127398	0.008925764	7.068074226	169.6338	7.373543262	7.214731216	0.029270209	23.1805496	556.3331909	24	19005.21973	
	03	498.6266	813.9160156	3.43998	14.83523	3.81244922	3.708478212	0.009158775	7.455985069	178.9436	7.758127213	7.547349453	0.030619649	24.9221992	598.1328125	24	19533.98438	
	04	484.555	790.9470215	3.437373	14.8398	5.88226938	5.726760387	0.0141433	11.07082939	265.6999	7.523783684	7.324750423	0.029716566	23.5365715	564.8776855	24	18982.72852	
	05	479.0851	782.0186157	3.420521	14.86953	5.87877083	5.732252121	0.014156858	10.95685577	262.9645	7.485309124	7.325516701	0.029719671	23.2639217	558.3341064	24	18768.44678	

Unit 4 - CEMS Data

	06	489.5246	799.0592041	3.413652	14.88163	3.76046038	3.686500788	0.0091045	7.277190208	174.6526	7.707411289	7.555654526	0.030653354	24.4980659	587.9536133	24	19177.4209
	07	484.5773	790.9827881	3.416081	14.87733	3.28912783	3.222904444	0.007959562	6.292174816	144.72	7.608530521	7.453123569	0.030237369	23.9041786	549.7960815	24	18983.58691
	08	483.2307	788.7855225	3.428914	14.85472	3.8234179	3.728956699	0.009209347	7.261208534	174.269	7.390714169	7.214764595	0.029270338	23.0930786	554.2338867	24	18930.85254
	09	483.1895	788.7182617	3.435783	14.8426	3.92341948	3.819879532	0.009433904	7.449418068	178.786	7.349537373	7.159044266	0.029044297	22.9047298	549.713501	24	18929.23828
	10	485.0877	791.8170166	3.444495	14.82725	3.26379251	3.170650005	0.00783051	6.201405525	148.8337	7.602323055	7.386340618	0.029966442	23.7300453	569.5211182	24	19003.6084
	11	490.4616	800.5884399	3.468216	14.78543	2.8100512	2.711599588	0.006696803	5.363499641	128.724	8.042868614	7.760442734	0.031484164	25.2090797	605.0178833	24	19214.12256
	12	489.6376	799.2431641	3.476674	14.77052	3.03835297	2.926277399	0.007226984	5.775833607	138.62	7.908049583	7.610948086	0.030877676	24.6821918	592.3726196	24	19181.83594
	13	490.8272	801.1849365	3.457532	14.80427	3.566818	3.450979471	0.008522834	6.82030344	163.6873	7.721400738	7.473753929	0.030321075	24.2947369	583.0737305	24	19228.43848
	14	491.8738	802.8934326	3.443605	14.82882	3.25711703	3.165260077	0.007817198	6.276607037	150.6386	7.775615692	7.556399345	0.030656362	24.6142464	590.7418823	24	19269.44238
	15	487.7993	796.2431641	3.457213	14.80482	2.91975045	2.82702589	0.006981867	5.560325623	133.4478	7.792944908	7.543412685	0.030603679	24.3697586	584.8742065	24	19109.83594
	16	486.8739	794.7317505	3.457087	14.80505	2.9281776	2.834567547	0.007000491	5.563715935	133.5292	7.720607281	7.473725796	0.030320957	24.097208	578.3330078	24	19073.56201
	17	487.8596	796.3418579	3.455305	14.80818	3.14964151	3.050400496	0.00753353	6.000213623	144.0051	7.654310226	7.413315296	0.03007588	23.9510994	574.826416	24	19112.20459
	18	490.2993	800.3239136	3.456452	14.80618	3.33645034	3.230079651	0.007977281	6.385629654	153.2551	7.623944283	7.381393909	0.02994637	23.9676952	575.2246704	24	19207.77393
	19	488.8049	797.8842773	3.444495	14.82726	3.31689453	3.222368002	0.007958239	6.34965229	152.3917	7.615198612	7.398756027	0.0300168	23.9502087	574.8049927	24	19149.22266
	20	487.0138	794.9603882	3.449584	14.81827	3.1736505	3.078847408	0.007603788	6.045002937	145.0801	7.674343109	7.445154667	0.030205041	24.0121956	576.2927246	24	19079.04932
	21	490.5905	800.7993164	3.436163	14.84194	3.52118921	3.429517508	0.008469833	6.782754421	162.7861	7.614405632	7.41572237	0.030085629	24.0910969	578.1862793	24	19219.16359
	22	489.9366	799.7319336	3.43025	14.85236	3.93264174	3.831187963	0.009461833	7.549645901	181.1915	7.528711319	7.345324993	0.029800046	23.839941	572.1586304	24	19193.56641
	23	491.2779	801.9202271	3.452571	14.813	3.35838914	3.255427837	0.008039884	6.44732666	154.7358	7.700732708	7.464066029	0.030281762	24.2851582	582.843811	24	19246.08545
	24	488.0577	796.6645508	3.457341	14.8046	3.17619371	3.074009657	0.007591841	6.051492691	145.2358	7.718539238	7.471202374	0.030310716	24.148838	579.5720825	24	19119.94922
	25	488.8487	797.9559937	3.477882	14.7684	3.27539921	3.151794672	0.007783943	6.21163559	149.0793	7.636185646	7.347723961	0.029809771	23.78792	570.9100952	24	19150.94385
	26	488.7552	797.8035889	3.47076	14.78095	3.36220503	3.242114544	0.008007007	6.387779713	153.3067	7.6454072	7.37138176	0.029905742	23.8616047	572.6785278	24	19147.28613
	27	486.9119	794.7945557	3.457088	14.80504	3.49336672	3.381623268	0.00835155	6.638669968	159.3281	7.491668701	7.251971245	0.029421296	23.3855286	561.2526855	24	19075.06934
	28	486.805	794.6196289	3.443542	14.82895	3.48764372	3.389738321	0.008371592	6.653114796	159.6747	7.395642757	7.187246799	0.029158713	23.1705914	556.0941772	24	19070.87109
	29	484.8846	791.4851074	3.433303	14.84699	3.46220636	3.37450695	0.008333976	6.597663879	158.3439	7.466709614	7.278123379	0.029527392	23.3712749	560.9105835	24	18995.64258
	30	482.9725	788.3640137	3.42917	14.85427	3.38652873	3.304528236	0.00816115	6.435003757	154.4401	7.454944611	7.275548935	0.029516954	23.270092	558.4821777	24	18920.73633
	31	487.8678	796.3552246	3.439662	14.83577	2.94550657	2.865885019	0.007077836	5.637308121	135.2954	7.762420177	7.552172184	0.03063922	24.3998337	585.5960083	24	19112.52539
Feb04	01	487.816	796.2700195	3.44227	14.83118	2.88111782	2.800351143	0.006915991	5.509739876	132.2337	7.891834259	7.672380924	0.031126909	24.7853661	594.8488159	24	19110.48047
	02	479.1758	782.166687	3.449456	14.81851	2.3332572	2.264064074	0.005591528	4.374664783	104.992	7.790083885	7.558806419	0.030666133	23.9906502	575.7755737	24	18772.00049
	03	481.7147	786.3101807	3.462938	14.79472	2.33277965	2.254192591	0.005567147	4.377961159	105.0711	7.847476482	7.583683014	0.030767053	24.1925831	580.6220093	24	18871.44434
	04	486.014	793.328186	3.436123	14.84201	2.90684533	2.83130002	0.006992421	5.54886961	127.624	7.648344994	7.449389935	0.03022223	23.9752216	551.4301147	24	19039.87646
	05	488.1434	796.8036499	3.439598	14.83588	3.12547708	3.040699959	0.007509575	5.985851765	143.6604	7.57688427	7.371693134	0.02990702	23.832346	571.9763184	24	19123.2876
	06	430.3603	732.9653931	3.170423	13.72209	3.2685008	2.957383394	0.007303807	5.72502327	131.6755	7.0735116	6.892599106	0.02796332	22.1784191	510.1036377	22.75	16674.96269
	07															0	0
	08	462.8654	788.392395	3.36492	14.96754	4.66485643	8.055830956	0.019895351	8.015439987	184.3551	7.350063324	7.462726116	0.030276317	23.2530079	534.8192139	22.87778	18036.66548
	09	493.8131	806.0593262	3.423763	14.8638	3.52102995	3.441246271	0.008498796	6.852538586	164.4609	7.340315342	7.174761295	0.029108055	23.4647923	563.1550293	24	19345.42383
	10	491.6376	802.5078125	3.406859	14.89361	3.42516208	3.364606142	0.008309525	6.670458317	153.4205	7.274468422	7.145458698	0.028989179	23.2657394	535.1119995	24	19260.1875
	11	489.5831	799.1534424	3.41416	14.88074	3.45489383	3.385119677	0.008360181	6.6829319	160.3904	7.303589821	7.159698963	0.029046938	23.2137375	557.1296997	24	19179.68262
	12	488.3326	797.1130371	3.430315	14.85224	3.75203419	3.659213781	0.009037115	7.204631805	172.9112	7.208836079	7.033189774	0.028533705	22.7446823	545.8723755	24	19130.71289
	13	491.8545	802.8619995	3.432985	14.84755	3.68367124	3.590490341	0.008867385	7.121088028	170.9061	7.244926453	7.062536716	0.02865277	23.0052204	552.1253052	24	19268.68799
	14	486.2057	793.6420898	3.435148	14.84374	2.64852428	2.579534531	0.006370639	5.058590412	121.4062	7.41853714	7.227735043	0.029322967	23.2689037	558.4536743	24	19047.41016
	15	484.7638	791.2877808	3.43839	14.83801	2.87650752	2.798487186	0.006911382	5.470606327	131.2946	7.253828526	7.080735226	0.028645447	22.6659832	543.9835815	24	18990.90674
	16	482.25	787.1846924	3.454162	14.81021	3.04089785	2.944991112	0.007273202	5.726333618	137.432	7.048102379	6.829348564	0.027706716	21.8107338	523.4575806	24	18892.43262
	17	481.6428	786.1934814	3.450409	14.81682	3.21562123	3.118688345	0.007702179	6.052983761	145.2716	6.997068405	6.786485672	0.027532816	21.6493874	519.5853271	24	18868.64355
	18	481.3322	785.6867676	3.42103	14.86862	2.78429675	2.72379756	0.006726925	5.285638809	126.8553	7.037291527	6.883955956	0.027928257	21.9467964	526.7230835	24	18856.48242
	19	482.8876	788.2249146	3.434956	14.84407	2.64629841	2.577912569	0.006366632	5.019135475	120.4593	7.178309441	6.993655205	0.028373308	22.3641548	536.7396851	24	18917.39795
	20	480.9695	785.0949707	3.442333	14.83107	2.47236824	2.403753757	0.005936515	4.660597801	111.8543	7.276404381	7.074117661	0.028699746	22.5322304	540.7734985	24	18842.2793
	21	478.9885	781.8616333	3.440235	14.83476	2.38508582	2.319979906	0.005729623	4.480221272	107.5253	7.287373543	7.088980675	0.028760053	22.4861031	539.6665039	24	18764.6792
	22	476.9557	778.5431519	3.451173	14.81548	2.36394119	2.292217493	0.005661059	4.407299995	105.7752	7.262413979	7.042858601	0.028572921	22.2452583	533.8861694	24	18685.03564
	23	479.088	782.0230713	3.478138	14.76795	2.53119206	2.435252905	0.006014312	4.703727245	112.8895	7.226005554	6.952672005	0.028207034	22.0587254	529.4094238	24	18768.55371
	24	482.3602	787.3640137	3.477183	14.76963	2.85917783	2.751600742	0.006795591	5.350667953	128.416	7.133159637	6.865331173	0.027852692	21.9308376	526.3400879	24	18896.73633
	25	477.0304	778.6641846	3.40374	14.89909	2.67641425	2.632284641	0.006500916	5.061231613	116.4083	7.13522625	7.014874935	0.0284594	22.1612301	509.7082825	24	18687.94043
	26	481.6456	786.1980591	3.430377	14.85214	2.54073215	2.47797823	0.006119829	4.811794281	115.4831	7.248105049	7.072064877	0.028691426	22.5581169	541.3947754	24	18868.75342
	27	486.4176	793.9874268	3.438772	14.83734	2.57666206	2.507277489	0.00619219	4.918095112	118.0343	7.314719677	7.118561745	0.02888005	22.9304371	550.3305054	24	19055.69824
	28	488.4755	797.3461914	3.428787	14.85494	2.79383492	2.726901293	0.006734591	5.370650291	128.8956	7.277994156	7.103402138	0.02881855	22.9783459	551.4802856	24	19136.30859
	29	485.2996	792.1622925	3.425926	14.85998	2.93246961	2.864546776	0.007074531	5.605254173	134.5261	7.196434975	7.029760838	0.028519792	22.5948334	542.276001	24	19011.89502
Mar04	01	479.2637	782.3100586	3.418358	14.87333	2.67348409	2.617105484	0.006463427	5.057514668	121.3803	7.170361519	7.019739151	0.028479138	22.2806664	534.7360229	24	18775.44141
	02	478.201	780.574585	3.43203	14.84923	2.26457667	2.20751214	0.005431379	4.240250587	101.766	7.386209965	7.202613354	0.029128438	22.7385864	545.7260742	24	18733.79004
	03	480.6623	784.5925293	3.407993	14.89161	3.1448729	3.089250803	0.007518831	5.897981644	141.5516	7.064636707	6.936357498	0.027722904	21.7561455	522.147522	24	18830.2207
	04	483.0529	788.4940796	3.410728	14.88679	3.45711827	3.391946793	0.008255555	6.510465145	156.2512	7.052554131	6.919783115	0.027656663	21.8076382	523.3833008	24	18923.85791
	05	483.5052	789.2340698	3.42141	14.86795	3.87747383	3.791610479	0.009228283	7.283191204	174.7966	6.843170643	6.693945885	0.026754059	21.1165676	506.7976074	24	18941.61768
	06	479.0354	781.9378052	3.419248	14.87177	3.7189672	3.640002012	0.00885929	6.929493427	166.3078	6.643805504	6.502812386	0.025990142	20.3258629	487.8207092	24	18766.50732
	07	471.9069	770.3009033	3.423001	14.86515	3.50672245	3.4284513	0.008344402	6.430485725	154.3317	6.484819412	6.340081692	0.025339758	19.5251369	468.603302	24	18487.22168

Unit 4 - CEMS Data

	08	467.8018	763.6011353	3.420075	14.8703	3.92246628	3.838138342	0.00934153	7.126560543	171.0854	6.32535696	6.189323902	0.024737203	18.8938923	453.4533997		24	18326.42725
	09	468.0385	763.9868774	3.412826	14.88307	4.33789158	4.253037453	0.010351334	7.910278797	189.8467	6.279094219	6.157413483	0.024609666	18.8036366	451.2872925		24	18335.68506
	10	465.2309	759.4038696	3.432794	14.84787	4.09114981	3.987950325	0.00970615	7.372118473	176.9308	6.316931725	6.158821106	0.024615299	18.6946586	448.6766052		24	18225.69287
	11	466.5191	761.506958	3.405639	14.89575	4.08606243	4.014512062	0.009770795	7.441629887	178.5991	6.389271736	6.27809	0.025091976	19.1101494	458.6436157		24	18276.16699
	12	467.33	762.829895	3.429806	14.85314	3.9494946	3.853927135	0.00937996	7.156914234	171.7659	6.510098457	6.352514744	0.025389433	19.3686507	464.852417		24	18307.91748
	13	468.3188	764.4442749	3.43076	14.85147	4.03137064	3.932015419	0.009570006	7.314654827	175.5517	6.464311123	6.30573988	0.025202483	19.269434	462.4664001		24	18346.6626
	14	468.2147	764.2738647	3.424717	14.86213	4.31102467	4.212657452	0.010253052	7.835225105	188.0454	6.33012867	6.185398102	0.024721516	18.8968754	453.5249939		24	18342.57275
	15	465.7442	760.2424316	3.430059	14.8527	4.32406187	4.21822691	0.01026662	7.806214333	187.3491	6.207551479	6.0564785	0.024206258	18.4039593	441.6950073		24	18245.81836
	16	464.3213	757.9194336	3.420774	14.86907	4.3456831	4.250807762	0.010345912	7.842815876	188.2276	6.17845726	6.044294357	0.024157558	18.3106117	439.4547119		24	18190.06641
	17	463.4588	756.5113525	3.404622	14.89755	4.12819242	4.057260513	0.009874836	7.471442699	179.3146	6.262559414	6.155789375	0.024603171	18.6127586	448.7062073		24	18156.27246
	18	463.6706	756.8566895	3.402842	14.90069	3.88569538	3.821617842	0.009301322	7.041127205	168.987	6.402783871	6.297070026	0.025167838	19.0490131	457.1763		24	18164.56055
	19	465.228	759.399231	3.419502	14.87131	3.99830198	3.912070751	0.009521473	7.231328964	173.5519	6.392290592	6.256671429	0.025006387	18.9907169	455.7771912		24	18225.58154
	20	465.0136	759.0494995	3.409964	14.88812	4.37859297	4.296179295	0.010456337	7.938193321	190.5166	6.250795364	6.134432316	0.024517834	18.6109924	446.6637878		24	18217.18799
	21	464.8165	758.7266846	3.402333	14.90158	4.31500006	4.242788315	0.010326393	7.836912155	188.0859	6.283228874	6.180755615	0.024702966	18.7427635	449.8262939		24	18209.44043
	22	463.4175	756.4440918	3.40017	14.9054	3.92151117	3.859380484	0.009393228	7.105997086	170.5439	6.365263462	6.265134811	0.025040207	18.9424877	454.6196899		24	18154.6582
	23	469.6702	766.6505737	3.431459	14.85023	4.07525015	3.9739995	0.009672197	7.416104794	177.9865	6.44666338	6.287410259	0.025129242	19.2660789	462.3858948		24	18399.61377
	24	478.4911	781.0499878	3.41607	14.87737	4.00720549	3.926269293	0.009556031	7.463185787	179.1165	6.747780323	6.610517502	0.026420612	20.6370506	495.2891846		24	18745.19971
	25	476.9725	778.5701294	3.419631	14.87109	4.03884315	3.952138901	0.00961899	7.488440514	179.7226	6.689115524	6.546337605	0.0261641	20.3736744	488.9682007		24	18685.68311
	26	481.9948	786.7675781	3.426053	14.85976	3.8863771	3.795657873	0.009238136	7.269376278	174.465	6.812646866	6.654490948	0.026596362	20.9271793	502.2522888		24	18882.42188
	27	481.4231	785.8348999	3.41874	14.87266	3.9679358	3.884381294	0.009454081	7.427974701	178.2714	6.78339386	6.639874458	0.026537959	20.8567257	500.5614014		24	18860.0376
	28	473.8273	773.4354858	3.400934	14.90405	4.13280153	4.066419601	0.009897126	7.652135372	183.6512	6.527586937	6.423023701	0.025671238	19.8611546	476.6676941		24	18562.45166
	29	468.5796	764.8703613	3.375559	14.94879	3.99400902	3.958165884	0.009633654	7.371397495	176.9135	6.546029568	6.490262508	0.025939984	19.8413296	476.1918945		24	18356.68867
	30	471.5057	769.6461792	3.417977	14.87401	3.82008076	3.740187407	0.009103125	7.006924629	168.1662	6.616140842	6.478163242	0.025891624	19.9303589	478.3285133		24	18471.5083
	31	474.0109	773.7359009	3.416578	14.87646	3.92898488	3.848441124	0.009366607	7.247357845	173.9366	6.643964767	6.507688999	0.026009634	20.1255283	483.0126953		24	18569.66162
Apr04	01	476.159	777.2426758	3.398516	14.90832	3.47365379	3.418720961	0.008320722	6.468151093	155.2356	6.966861725	6.861657619	0.027424367	21.3164215	511.5940857		24	18653.82422
	02	474.313	774.229248	3.413971	14.88105	3.06998992	3.00671196	0.007317945	5.670912266	136.1019	7.150965691	7.011642933	0.02802382	21.6945038	520.6680908		24	18581.50195
	03	472.7034	771.6014404	3.437819	14.83903	3.70402217	3.605575323	0.008775503	6.771615982	162.5188	6.756048203	6.576498985	0.026284646	20.2828369	486.7880859		24	18518.43457
	04	453.0769	771.7199097	3.4267	14.85862	3.06660485	2.994794846	0.007288939	5.625182152	129.3792	6.937644482	6.775127886	0.027078517	20.8980217	480.6545105		24	18521.27783
	05	475.1872	775.6552734	3.434384	14.84507	3.12293386	3.042980909	0.007406218	5.744496346	137.8679	6.943171501	6.765590191	0.027040409	20.97575	503.4179993		24	18615.72656
	06	477.0054	778.6239014	3.429106	14.85437	3.19113755	3.114206791	0.007579574	5.901522636	141.6365	6.943013191	6.775852203	0.027081417	21.0879631	506.1111145		24	18686.97363
	07	475.8955	776.8120117	3.406785	14.89374	3.16712999	3.111049175	0.007571886	5.882388592	141.1773	6.949531078	6.826517582	0.027283913	21.1963158	508.7116089		24	18643.48828
	08	471.7145	769.9869995	3.425607	14.86054	3.27969241	3.203849077	0.007797754	6.005552292	144.1333	6.779101372	6.622963905	0.026470367	20.3851376	489.2433167		24	18479.68799
	09	462.9285	755.6459351	3.428343	14.85573	2.67332411	2.608634949	0.006349076	4.79910183	115.1785	6.675124645	6.515862465	0.026042309	19.6793251	472.3038025		24	18135.50244
	10	367.4366	685.4089355	3.075978	13.73632	4.98502827	10.46833706	0.025478519	7.730245113	162.3351	6.324314117	6.657941341	0.026610143	18.7442932	393.6301575	20.69722		14186.06073
	11	472.5963	771.4263916	3.421156	14.8684	2.49748826	2.443206549	0.00594645	4.58708334	110.09	7.000724792	6.84833765	0.027371138	21.1152287	506.7655029		24	18514.2334
	12	475.1264	775.5564575	3.419885	14.87065	2.53310037	2.479465723	0.006034697	4.679638386	112.3113	7.002950191	6.852209091	0.0273866	21.2423992	509.8175964		24	18613.35498
	13	480.5276	784.3729248	3.458231	14.80303	2.60623288	2.522026777	0.006138282	4.81454134	115.549	7.011535168	6.785185814	0.027118713	21.2722416	510.5338135		24	18824.9502
	14	484.137	790.2652588	3.440615	14.83408	2.56012917	2.490087986	0.00606055	4.789262295	114.9423	7.104382992	6.909945965	0.027617358	21.8262157	523.8292236		24	18966.36621
	15	481.4447	785.8707275	3.446784	14.82321	2.53850579	2.464411736	0.005998054	4.715055943	113.1613	7.050009251	6.845227242	0.027358692	21.501545	516.0371094		24	18860.89746
	16	482.5852	787.7316895	3.448819	14.81962	2.34549928	2.275657892	0.005538655	4.363591671	104.7262	7.231093884	7.016811371	0.028044462	22.0915413	530.1970215		24	18905.56055
	17	483.5525	789.3102417	3.459949	14.8	2.25789928	2.183163643	0.005313535	4.194807529	100.6754	7.299139023	7.060819626	0.028220367	22.273716	534.5692139		24	18943.4458
	18	486.5524	794.2071533	3.461857	14.79664	2.54454827	2.459834576	0.005986916	4.754928589	114.1183	7.134113789	6.896563053	0.027563863	21.891592	525.3981934		24	19060.97168
	19	483.6535	789.4760132	3.455943	14.80708	2.51672506	2.436742544	0.005930715	4.683315754	112.3996	7.005812168	6.784039021	0.027114142	21.4064121	513.7539063		24	18947.42432
	20	477.8487	780.0006104	3.436038	14.84216	2.59065294	2.523299932	0.006141382	4.790593147	114.9742	6.97449255	6.792581081	0.027148295	21.176733	508.2416077		24	18720.01465
	21	480.8378	784.8795776	3.424105	14.86321	2.72557831	2.664097548	0.006484061	5.089735985	122.1537	6.953453064	6.795657158	0.027160566	21.3191166	511.6588135		24	18837.10986
	22	484.3769	790.6555176	3.443478	14.82905	2.67125869	2.59504509	0.006316001	4.993916988	119.854	7.106926441	6.907814503	0.027608845	21.8304005	523.9296265		24	18975.73242
	23	483.1265	788.6151733	3.415879	14.8777	3.16919804	3.106060743	0.007559744	5.960186958	143.0445	6.887209892	6.747563362	0.026968341	21.2693958	510.4654846		24	18926.76416
	24	480.7805	784.7854614	3.407866	14.89184	3.24312615	3.184297085	0.007750162	6.083010674	145.9922	6.821549416	6.697784424	0.026769396	21.0154037	504.3696899		24	18834.85107
	25	473.8351	773.4488525	3.405194	14.89655	3.14980173	3.093961239	0.007530295	5.82805872	139.8734	6.644122601	6.529099464	0.026095213	20.185358	484.4486084		24	18562.77246
	26	472.2363	770.8389893	3.392285	14.9193	3.44964671	3.402319193	0.008280799	6.38492012	153.2381	6.435693741	6.348723888	0.025374295	19.5625458	469.5010986		24	18500.13574
	27	470.0746	767.3096924	3.392793	14.9184	3.4922545	3.443571568	0.008381203	6.432202339	154.3728	6.447776318	6.360749722	0.02542235	19.5076294	468.1831055		24	18415.43262
	28	474.7966	775.0183716	3.36068	14.97503	3.1232512	3.107761621	0.007563884	5.864446163	140.7467	6.893091202	6.864984035	0.02743765	21.2643967	510.3454895		24	18600.44092
	29	484.1042	790.2115479	3.423191	14.86482	2.83469248	2.771386147	0.006745194	5.33052206	127.9325	7.132205963	6.973283291	0.027870495	22.0251675	528.6040039		24	18965.07715
	30	481.8492	786.5299072	3.424401	14.86267	2.71752262	2.654598236	0.006460946	5.085642338	122.0554	6.820118427	6.66314888	0.026630962	20.9481373	502.7553101		24	18876.71777
Total		333,515	552757.4059							158,688					353,731	16888.39		13,169,645
Average		469.0793	777.4365765	3.354698	14.87476	4.94325323	5.273685346	0.013010454	9.499417841	223.1901	6.699588397	6.674163099	0.027040551	21.0249704	497.511807	23.10313		18015.92979
Ann Avg.		166,758								79,344					176,865	8444.196		6,584,822

6455.708173 mmscf/yr

APPENDIX B

APPLICATION TO EPA TO MODIFY PSD PERMIT

13125
File # 708.1.1.
Entered 6-18-04 MDC

Sycamore Cogeneration Company | Box 80598, Bakersfield, CA 93380 • (661) 392-2630

Neil E. Burgess, Executive Director

June 11, 2004

SY-8045

Mr. Bob Baker
Air-3
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, CA 94105

Re: **Sycamore Cogeneration Company (NSR 4-4-8, SJ 85-09) Request for Approval to Amend PSD Permit to Include Simple Cycle Operation**

Dear Mr. Baker:

This request for a minor modification to Sycamore Cogeneration Company's (Sycamore,) PSD permit (NSR 4-4-8, SJ 85-09) is a follow up to the recent telephone conversation with Sycamore representatives. Accordingly, Sycamore is hereby submitting a request to modify the current PSD permit to allow two of the four gas turbine units (Units 1 and 4) to be operated in either cogeneration, or simple cycle mode. This request is similar to the request that was recently approved by EPA for the Kern River Cogeneration Company (KRCC) (NSR-4-4-8, SJ 84-01) on April 15, 2004.

Background

Sycamore is a cogeneration facility located in the Kern River oilfield near Bakersfield, CA. The facility utilizes four (4) General Electric Frame 7EA combustion turbines (CTs) and four (4) unfired heat recovery steam generators (HRSGs) to cogenerate 300 MW (nominal rating) of electricity and 1.8 million pounds per hour of steam for enhanced oil recovery. Each CT/HRSG generates approximately ¼ of the total steam and electricity output for Sycamore. Each CT is equipped with Dry Low NOx (DLN) combustor technology capable of meeting the current PSD NOx limit of 16.4 ppmv at 15% O2, dry and a CO emissions limit of 25 ppmv at 15% O2, dry.

As a result of gradually declining steam demand and negotiations regarding the Sycamore electricity contract, it has been determined that two of the four Sycamore CT units must be able to operate in either cogeneration, or simple cycle mode. As a result, Sycamore is requesting this modification to the PSD permit.

Description of Simple Cycle Operation for Units 1 and 4

No additional physical construction is needed to facilitate the ability of Units 1 and 4 to operate in either mode of operation. Each CT discharges to a HRSG through a transition section that is equipped with a gas-tight bypass stack. In order to operate in simple cycle, the bypass stack damper would be repositioned to block off the HRSG, directing the CT exhaust through the bypass stack to the atmosphere. Since the DLN operation is unaffected by the positioning of the bypass damper, the change to simple cycle operation will not impact the current air pollution control system that has been previously determined to represent Best Available Control Technology (BACT). As a result, during simple cycle operations we do not anticipate any change in normal CT emission rates.

The current Sycamore permit is based on a continuous, 24-hr day operation. While Sycamore does not propose to specifically restrict its operating schedule in the future, it is anticipated that the power host will operate the two units in simple cycle on a dispatch schedule that is anticipated to be substantially fewer hours than historical operations. At the present time, we envision that the simple cycle units would operate in response to peak power demands occurring during the normal work week, Monday through Friday, and would not operate on weekends or holidays. In simple cycle mode instead of a 24-hr operation, it is more likely that these two units would ultimately operate for no more than a 6 to 8 hr/day. However, to be conservative, projected actual emissions have been calculated assuming the equivalent of a 22 hr/day operation, 5 days per week. We also anticipate that the units will operate more frequently in the summer peak power period, April through October, and less during the off-peak period of the year, November through March. The addition of simple cycle operation will increase the number of startups and shutdowns for the affected CT. Although emissions are higher during startups and shutdowns, Sycamore will not be increasing either permitted maximum daily or maximum annual emissions.

Proposed Emissions Changes Are Not Significant

Since the proposed amendment constitutes a change in the method of operation, we have completed an evaluation of the applicability of PSD regulations. Pursuant to 40 CFR 52.21 (a) (2) (iv) (c), existing units are to calculate emissions increases based on an "actual to projected actual" applicability test. The test involves summing the difference between *projected actual emissions* and *baseline actual emissions* as defined in 40 CFR 52.21 (b) (41) and (b) (48), respectively. As specified in 40 CFR 52.21 (b) (48) (i), for an existing electric utility steam generating unit, *baseline actual emissions* is the average rate in tons per year (tpy) at which the unit actually emitted during any consecutive 24-month period within the last five years. The attached calculations demonstrate that the impact of the proposed simple cycle addition to Units 1 and 4 is not considered to be significant under PSD regulations and does not require additional PSD analysis.

- Baseline Actual Emissions

For NOx and CO, the reported baseline emissions reflect actual continuous emissions monitoring system (CEMS) data collected for the period May 2002 – Apr 2004. For VOC, SO2 and PM10 baseline emissions were calculated using continuously recorded fuel consumption in conjunction with emissions factors from source tests and fuel sulfur content from monthly fuel analyses over the same period. Historical testing has demonstrated that VOC emissions are below detection limits. Therefore, baseline VOC emissions are reported as negligible.

- Projected Actual Emissions

Projected actual emissions for NOx and CO during normal operation were calculated based on the average CEMS-based emission factors in lb/MMBtu observed during the baseline period and a maximum fuel consumption of 1020 MMBtu/hr (LHV.) Startup and shutdown NOx and CO emissions were based on the current startup and shutdown limit in the SJVACPD Permit to Operate of 140 lb/hr (2-hour average). The calculation is summarized in Table 1, below. In fact, for most of the criteria air contaminants, Sycamore anticipates a decrease in emissions. Projected actual VOC, SO2 and PM10 emissions during normal operation were calculated using the source test or fuel analysis based emission factors from the baseline period and maximum fuel consumption rate. No test data is available to estimate projected actual VOC emissions during startup and shutdown, therefore the AP-42 Table 3.1-2a emission factor for natural gas-fired combustion turbines was applied using and a conservative safety factor of 10 to account for potentially higher startup and shutdown VOC emissions.

Although Sycamore anticipates that Unit 1 and Unit 4 in simple cycle mode will typically operate no more than 6 to 8 hr/day, 5 days/wk, 52 wks/yr, we have conservatively based projected actual emissions on 20 hr/day, 5 days/wk, 52 wks/yr. We have assumed that each day of operation would include up to 2 startups lasting ½ hour each and 2 shutdowns lasting ½ hour each. These operating assumptions yield a conservative total of 5200 normal hr/yr of operation and 520 startup/shutdown hr/yr for each unit.

- PSD Applicability Summary

Detailed calculations based on the above assumptions are included in Attachment A. The results of these calculations are summarized for Units 1 and 4 in the following Table 1,. These calculations demonstrate that the proposed operations change is not subject to full PSD review.

Table 1. Summary of PSD Applicability Review

	NOx	CO	VOC	SO2	PM10
Projected Actual Emissions, ton/yr	234.41	136.59	11.14	0.98	21.30
Baseline Actual Emissions, ton/yr	200.66	72.41	0.00	1.11	24.10
Net change, ton/yr	33.75	64.18	11.14	-0.13	-2.81
PSD significance thresholds	40	100	40	40	15
PSD Review Triggered?	No	No	No	No	No

Request for Minor Change to Existing PSD Permit Condition

We have reviewed the current PSD permit limits and have concluded that a very minor change is needed to accommodate simple cycle operation for Units 1 and 4. The current PSD permit limits CO emissions to 44 lb/hr on a 3-hour basis (Special Condition E.). While Sycamore is confident that we can continue to comply with this CO emission limit during normal operation (80% to full load), we note that the condition does not provide specific emission relief during either startups or shutdowns. Historically, these units have experienced only infrequent startups and shutdowns, which have been addressed through the excess emissions reporting requirement of the permit. Since we anticipate that there will be more frequent startups and shutdowns, we request that EPA add a new condition that specifically limits startup and shutdown emissions and amend the current condition. We are requesting a startup and shutdown CO emission limit of 140 lb/hr on a 2-hr average basis to make the PSD permit consistent with the current conditions in the San Joaquin Valley APCD Permit to Operate and the California Energy Commission license.

We recommend the following Section X.E. to be consistent with the recent change made to the KRCC PSD permit (noted in ***bold, italic underline***):

E. Emission Limits for CO

1. On and after the date of startup, Sycamore shall not discharge or cause the discharge of CO into the atmosphere from any of the four turbines governed by this permit in excess of the more stringent of 44 lbs/hr or 25 ppm corrected to 15% O2 and averaged over a 3-hour period***, except during startups and shutdowns.***

2. During startups and shutdowns, Sycamore shall not discharge or cause the discharge of CO into the atmosphere from any of the four turbines governed by this permit in excess of the more stringent of 140 lbs/hr averaged over a 2-hour period. A startup shall be defined as the period commencing with fuel flow to the turbine and ending when emissions are in compliance with Condition E.1. A shutdown shall be defined as the period commencing with the cessation of fuel flow to the turbine and ending when emissions are no longer detected by the continuous emissions monitoring system. Startups and shutdowns shall not exceed two hours in duration.

Summary

Sycamore is requesting that the PSD permit be modified to specifically address the option to operate Units 1 and 4 in either cogeneration or simple cycle mode. Based on our analysis, the request does not trigger a full PSD review. However, a minor change in the PSD permit is needed to specifically address emissions during startups and shutdowns.

Based on our recent conversation regarding these proposed changes, we understand that EPA will be able to respond to this request in a few weeks time. We respectfully request your help in expediting the approval of this minor PSD permit modification as expeditiously as possible.

If you have any questions, please contact either Mervyn Soares at (661) 392-2643 or our consultant, David Stein of URS at (510) 874-3143. Thank you for your prompt consideration.

Very truly yours,

E. Burgess

RWH:plc

Attachment

xc: N. Tronaas- CEC (w/attachment)
S. Tomlin – SJVAPCD, Southern Region (w/attachment)
T. Goff – SJVAPCD, Southern Region (w/attachment)

ATTACHMENT A

Supporting Emissions Calculations and Historical Operating Data

PSD Applicability Summary, tons/yr

	NOx	CO	VOC	SO2	PM10
Projected Actual Emissions, ton/yr	234.41	136.59	11.14	0.98	21.30
Baseline Actual Emissions, ton/yr	200.66	72.41	0.00	1.11	24.10
Net change, ton/yr	33.75	64.18	11.14	-0.13	-2.81
PSD significance thresholds	40	100	40	40	15
PSD Review Triggered?	No	No	No	No	No

Projected Actual Emissions (ton/yr)

	NOx	CO	VOC	SO2	PM10
Unit 1, startups & shutdowns	36.40	36.40	5.57	0.04	0.97
Unit 1, normal operation	89.89	29.28	negligible	0.45	9.68
Unit 4, startups & shutdowns	36.40	36.40	5.57	0.04	0.97
Unit 4, normal operations	71.71	34.50	negligible	0.45	9.68
Total	234.41	136.59	11.14	0.98	21.30

		Comment
Average CO Emission Factor (Unit 1), lb/MMBtu	0.01104	Average of May 02 - Apr 04
Average CO Emission Factor (Unit 4), lb/MMBtu	0.01301	Average of May 02 - Apr 04
Average NOx Emission Factor (Unit 1), lb/MMBtu	0.0339	Average of May 02 - Apr 04
Average NOx Emission Factor (Unit 4), lb/MMBtu	0.0270	Average of May 02 - Apr 04
Projected Maximum Normal Operating Hours/Day	20	Average maximum daily hours over the year
Projected Maximum Normal Operating Hours/Year	5200	5 days/wk,52 wk/yr
Projected Maximum Startup & Shutdown Operating Hours/Year	520	260 operating days, (2) 0.5 hr starts and (2) 0.5 hr stops per day
Projected Maximum Heat Input, MMBtu/hr	1020	Unchanged
Projected Maximum Startup & Shutdown NOx & CO Emissions, lb/hr	140	
Estimated VOC Emission Factor for Startup/Shutdown	2.10E-02	10 times EPA AP-42 Table 3.1-2a factor for gas-fired turbines

Baseline Actual Emissions

Historical Average Hourly Emission Rates (lb/hr), May 2002 - Apr 2004

	NOx	CO	VOC	SO2	PM10	Comment
Unit 1	26.67	7.87	negligible	0.13	2.85	CEMS data - NOx & CO, Source Test Data/Historical Fuel Consumption - VOC, SO2 & PM10
Unit 4	21.02	9.50	negligible	0.13	2.84	CEMS data - NOx & CO, Source Test Data/Historical Fuel Consumption - VOC, SO2 & PM10

Historical Average Daily Emission Rates (lb/day), May 2002 - Apr 2004

	NOx	CO	VOC	SO2	PM10	Comment
Unit 1	631.37	184.17	negligible	3.05	66.14	CEMS data - NOx & CO, Source Test Data/Historical Fuel Consumption - VOC, SO2 & PM10
Unit 4	497.51	223.19	negligible	3.03	65.76	CEMS data - NOx & CO, Source Test Data/Historical Fuel Consumption - VOC, SO2 & PM10

Historical Annual Average Emission Rates (ton/year), May 2002 - Apr 2004

	NOx	CO	VOC	SO2	PM10	Comment
Unit 3	112.23	32.74	negligible	0.56	12.09	CEMS data - NOx & CO, Source Test Data/Historical Fuel Consumption - VOC, SO2 & PM10
Unit 4	88.43	39.67	negligible	0.55	12.02	CEMS data - NOx & CO, Source Test Data/Historical Fuel Consumption - VOC, SO2 & PM10
Total	200.66	72.41	0.00	1.11	24.10	

Emission Factors for VOC, SO2 and PM10

			Comment
Maximum Fuel Gas Rate:	1020	MMBtu/hr (LHV)	
VOC Emission Factor:	negligible	lb/MMBtu(LHV)	based on compliance tests
Average S content:	0.06	gr/100 scf	based on monthly fuel S tests
Fuel Heat Content, avg:	1020	Btu/scf (LHV)	based on monthly fuel tests
SO2 Emission Factor:	0.000168	lb/MMBtu(LHV)	
PM Emission Factor:	0.00365	lb/MMBtu(LHV)	based on compliance tests

Unit 1 CEMS DATA

Month/Year	Day	Daily Fuel Gas in tons/day	fuel gas heat rate (mmbtu/hr) – tower heating value	Average CO2 conc. (%)	Average O2 conc. (%)	Average CO conc. uncorrected (ppm)	Average CO conc. corrected (ppm)	Average CO emission factor (lb/mmbtu)	Average CO mass emission rate (lb/hr)	CO mass emissions rate (lb/day)	Average NOx conc. uncorrected (ppm)	Average NOx conc. corrected (ppm)	Average NOx emission factor (lb/mmbtu)	Average NOx emission rate (lb/hr)	Daily NOx mass emissions rate (lb/day)	Daily turbine run time (hr/day)	Fuel Gas (MMBtu/day)
May02	01	480.28	820.6848755	3.065775	15.47394	4.02283335	4.372478485	0.01079031	8.857404709	203.7203	8.384263039	9.117139816	0.03695973	30.3139095	697.2199097	24	19696.43701
	02	476.7253	814.6102295	3.080738	15.44745	4.33662081	4.691779613	0.011578279	9.434679985	226.4323	8.410282135	9.100643158	0.036892854	30.0531578	721.2758179	24	19550.64551
	03	473.8624	809.71875	3.099308	15.4146	4.35554028	4.683628559	0.011558158	9.361982346	224.6876	8.450982094	9.08968544	0.036848426	29.8380127	716.1123047	24	19433.25
	04	473.8491	809.6951904	3.073176	15.46083	4.10249519	4.447845936	0.010976311	8.888936996	195.5566	8.146019936	8.83407402	0.03581221	28.9863186	637.6989746	24	19432.68457
	05	469.8072	802.789856	3.090658	15.4299	4.17477512	4.503012657	0.011112436	8.927339554	214.2561	7.853996277	8.470046043	0.034336478	27.5570621	661.3695068	24	19266.95654
	06	471.0418	804.897583	3.096191	15.42011	3.9693675	4.271869183	0.010542032	8.488558769	203.7254	8.057972908	8.674717903	0.035166193	28.3078251	679.3878174	24	19317.54199
	07	475.4226	812.3850708	3.092821	15.42607	3.93582129	4.241571903	0.010467273	8.506101608	204.1464	8.35559082	9.005972862	0.036509056	29.658617	711.8068237	24	19497.2417
	08	476.6566	814.4928589	3.07777	15.4527	4.20662498	4.554481983	0.011239458	9.158088684	219.7941	7.994218826	8.654965401	0.035086133	28.584795	686.0350952	24	19547.82861
	09	477.8244	816.4879761	3.08398	15.44171	4.51674938	4.881493568	0.01204645	9.837451935	236.0988	7.841119289	8.475133896	0.034357101	28.0535049	673.2841187	24	19595.71143
	10	482.3651	824.2479248	3.079339	15.44993	4.62835693	5.010253906	0.012364204	10.19408798	244.6581	8.058927536	8.724060059	0.035366222	29.1526585	699.6638184	24	19781.9502
	11	479.9619	820.1403198	3.110436	15.39491	4.69051933	5.026615143	0.012404579	10.17408466	244.178	8.199309349	8.787816048	0.03562469	29.2246876	701.3925171	24	19683.36768
	12	132.0055	601.5094604	2.315322	12.16192	4.89036417	11.32842064	0.027956078	9.218374252	82.96537	6.88490963	10.61226368	0.043020755	30.2897854	272.6080627	8.472222	5096.121881
	13	480.3629	820.8256836	3.114378	15.38793	3.99480414	4.275135517	0.010550085	8.663199425	207.9168	8.634926796	9.242895126	0.037469525	30.7528706	738.0689087	24	19699.81641
	14	480.4729	821.0134888	3.115651	15.38568	3.65886998	3.914443731	0.009659979	7.933107853	190.3946	9.023326874	9.654547691	0.039138295	32.1378746	771.309021	24	19704.32373
	15	476.9613	815.013855	3.118259	15.38107	3.63772535	3.88799262	0.009594705	7.82242918	187.7383	8.753052711	9.356852531	0.037931487	30.9206715	742.0961304	24	19560.33252
	16	478.0053	816.7977295	3.123189	15.37234	3.49534297	3.729755878	0.00920421	7.519205093	127.8265	8.816571236	9.411235809	0.038151946	31.1512814	529.5717773	24	19603.14551
	17	473.0853	808.3900146	3.096446	15.41966	3.28382635	3.535200119	0.00872409	7.052988529	169.2717	8.758934975	9.427619934	0.038218372	30.9009876	741.6237183	24	19401.36035
	18	473.308	808.7703857	3.099944	15.41347	3.29543161	3.543280363	0.008744027	7.073169708	169.7561	8.974040031	9.649662018	0.039118499	31.638588	759.3261108	24	19410.48926
	19	479.6922	819.6801147	3.116512	15.38061	3.22150421	3.443429947	0.008497625	6.96612215	167.1869	9.25274086	9.890094757	0.040093217	32.8627586	788.7061768	24	19672.32275
	20	484.6291	828.1159668	3.126272	15.36689	3.43184161	3.659615517	0.009031121	7.482631207	179.5831	9.340023041	9.958817482	0.040371805	33.4265289	802.2366943	24	19874.7832
	21	489.0855	835.7302246	3.123284	15.37218	3.85712409	4.116601467	0.010158862	8.490812302	203.7795	8.925549507	9.525583267	0.03861551	32.2745132	774.5883179	24	20057.52539
	22	486.0221	830.4961548	3.056749	15.48992	3.74169469	4.079935074	0.01006838	8.359210014	192.2618	8.438456535	9.194948196	0.037275162	30.9509048	711.8707886	24	19931.90771
	23	483.8907	826.8532715	3.04518	15.51039	3.59764051	3.939117432	0.009720878	8.035881042	184.8253	7.811531067	8.549184799	0.034657318	28.637743	658.6680908	24	19844.47852
	24	478.2517	817.2202148	3.113988	15.38863	3.52046204	3.768112898	0.009298866	7.568676472	105.9615	8.122655869	8.701225281	0.035273679	28.6377563	400.9285889	24	19613.28516
	25	473.5989	809.2680664	3.110054	15.39559	3.64408422	3.905365944	0.009637574	7.802228928	187.2535	8.771972656	9.401187897	0.038111247	30.8582916	740.598999	24	19422.43359
	26	473.789	809.5919189	3.117242	15.38287	3.62437153	3.875366211	0.009563546	7.745315075	185.8876	8.410282135	8.993177414	0.036457192	29.5200577	708.4813843	24	19430.20605
	27	473.4286	808.9769287	3.118194	15.38118	3.58430505	3.830580711	0.009453025	7.6513381	183.6321	8.560681343	9.151193619	0.037097774	30.0141659	720.3400269	24	19415.44629
	28	472.7117	807.75177	3.117433	15.38253	3.92214918	4.192957878	0.010347303	8.359671593	200.6321	8.43253994	9.017087936	0.036554117	29.5332298	708.7974854	24	19386.04248
	29	467.1594	798.2643433	3.083625	15.44234	4.12253809	4.456568241	0.010997835	8.776911736	201.869	8.033060074	8.682427406	0.035197459	28.0909252	646.0913086	24	19158.34424
	30	461.7609	789.0397949	3.093966	15.42405	4.19480658	4.519196033	0.011152371	8.801534653	211.2368	7.86591959	8.476651192	0.034363266	27.1196918	650.8726196	24	18936.95508
	31	461.8242	789.1478271	3.10961	15.39636	3.68955374	3.954620838	0.00975913	7.703317165	184.8796	8.036510468	8.615908623	0.034927774	27.5668373	661.604126	24	18939.54785
Jun02	01	469.9807	803.0856323	3.105859	15.403	3.60656381	3.870731354	0.009552103	7.673326492	184.1598	8.274350166	8.880551338	0.036000617	28.9130173	693.9124146	24	19274.05518
	02	478.5139	817.6663818	3.10414	15.40605	3.72961783	4.004786491	0.009882932	8.083106995	193.9946	8.475306511	9.100782394	0.036893401	30.1702785	724.086731	24	19623.99316
	03	473.4753	809.0567627	3.119976	15.37803	3.87365842	4.137968063	0.010211591	8.267310143	198.4155	8.54287529	9.127804756	0.037002955	29.9405079	718.5722046	24	19417.3623
	04	466.2554	796.7199707	3.096301	15.41991	3.8447082	4.140142441	0.010216969	8.132343292	178.9115	8.189322472	8.81445694	0.035732709	28.4509315	625.9205322	24	19121.2793
	05	465.8351	796.0016479	3.14166	15.33964	3.46777081	3.697682858	0.009125059	7.241814613	173.8036	9.1117239	9.634752274	0.039058056	31.1615372	747.8768921	24	19104.03955
	06	463.8737	792.6498413	3.152345	15.32075	3.4143517	3.628456593	0.00895423	7.072535038	169.7408	9.304574013	9.804998398	0.03974824	31.5884037	758.1217041	24	19023.59619
	07	464.4668	793.6640015	3.123474	15.37183	3.55542326	3.799744606	0.009376926	7.434030056	178.4167	8.813361168	9.391831398	0.038073275	30.2540703	726.0977173	24	19047.93604
	08	349.9171	717.5094604	2.783781	14.40554	4.96089077	8.415679932	0.020768048	9.235697746	184.714	8.262936592	9.187709808	0.037245814	28.7178745	574.3574829	19.47778	13975.48961
	09	482.5987	824.6468506	3.133774	15.35359	3.25457501	3.461082935	0.008541185	7.045600414	169.0944	8.857665062	9.423130989	0.038200174	31.5055294	756.1326904	24	19791.52441
	10	476.8929	814.8967285	3.130215	15.3599	3.36856365	3.586677074	0.008851126	7.21449852	173.148	8.841608047	9.416016579	0.038171332	31.106741	746.5617676	24	19557.52148
	11	473.1234	808.4558716	3.14147	15.33998	3.66825128	3.891504049	0.009603364	7.768063068	186.4335	8.803769112	9.342485428	0.037873253	30.6236839	734.9683838	24	19402.94092
	12	471.6644	805.9631958	3.140029	15.34252	3.70688367	3.935552835	0.009712071	7.827363968	187.8567	8.468152046	8.987138748	0.036432724	29.3747921	704.9949951	24	19343.1167
	13	470.9727	804.7802124	3.126735	15.36607	3.81605634	4.070086956	0.010044079	8.082314491	177.8109	8.6687603	9.245978355	0.037482023	30.2082138	664.5806885	24	19314.7251
	14	472.5111	807.4089966	3.081112	15.44679	3.95201874	4.275060654	0.010549891	8.479743004	144.1556	8.230088234	8.904211998	0.036096536	29.0066757	493.1134949	24	19377.81592
	15	469.8979	802.9447632	3.111136	15.39367	3.73057246	3.997135401	0.009864053	7.922747612	190.1459	8.191041946	8.776637077	0.035579357	28.5755577	685.8134155	24	19270.67432
	16	472.7806	807.8691406	3.117113	15.38308	3.82803035	4.092648029	0.010099747	8.161419868	195.8741	8.180549622	8.749201775	0.03546815	28.6526623	687.6638794	24	19388.85938
	17	471.6322	805.9069214	3.115779	15.38545	3.79337049	4.056924343	0.010011583	8.073482513	193.7636	8.11075592	8.676948547	0.035175234	28.3562412	680.5498047	24	19341.76611
	18	466.6806	797.4474487	3.13749	15.34702	3.6481421	3.875473261	0.009563809	7.632628918	145.0199	8.014829636	8.515096664	0.034519121	27.5508842	523.4667969	24	19138.73877
	19	466.6566	797.4052734	3.167225	15.29438	3.44916987	3.63804841	0.008977897	7.151692867	171.6406	8.34303093	8.770214081	0.03555331	28.3730335	680.9528198	24	19137.72656
	20	471.0026	804.8318481	3.183189	15.26612	3.32579708	3.49499321	0.008624868	6.920300484	166.0872	9.033823013	9.43337822	0.038241725	30.8551331	740.5231934	24	19315.96436
	21	476.159	813.6431885	3.137973	15.34616	3.83634233	4.075261593	0.010056843	8.17367363	171.6472	8.225043297	8.737740517	0.035421681	28.7920475	604.6329956	24	19527.43652
	22	472.8987	808.0709839	3.143695	15.33601	3.95744371	4.1963377	0.010355643	8.368745804	200.8499	8.237306595	8.734578133	0.035408868	28.6151505	686.7636108	24	19393.70361
	23	467.2198	798.3676758	3.139562	15.34335	4.19846249	4.457016468	0.010998934	8.784082413	210.818	8.148434639	8.651699066	0.035072885	28.0030079	672.0722046	24	19160.82422
	24	420.4067	718.3516846	2.781058	13.88786	6.20630741	11.62647247	0.028691608	12.86328411	257.2657	7.491796494	8.246245384	0.03342922	25.6725769	513.4515381	23.83333	17120.71424
	25	464.909	794.4196167	3.113685	15.38914	4.17634439	4.469018936	0.011028548	8.75726223	201.417	8.063308716	8.632556915	0.034995273	27.7747211	638.8186035	24	19066.0708

	26	467.7665	799.3019409	3.121248	15.37576	3.66920328	3.929012537	0.009695929	7.735404015	185.6497	8.844789505	9.424915314	0.038207415	30.5907173	734.1771851	24	19183.24658	
	27	465.4033	795.2646484	3.116397	15.38436	3.93634057	4.210467339	0.010390504	8.261379242	181.7504	7.925755024	8.477489471	0.034366652	27.3257141	601.1657104	24	19086.35156	
	28	465.1624	794.8515625	3.078661	15.45112	3.91647792	4.241429329	0.010466912	8.320942879	199.7026	7.888335226	8.542355537	0.034629632	27.5246048	660.5905151	24	19076.4375	
	29	464.1149	793.0629883	3.083536	15.4425	3.80958748	4.118114471	0.010162607	8.060354233	193.4485	7.919498444	8.56189537	0.034708839	27.529171	660.7000732	24	19033.51172	
	30	462.0854	789.5938721	3.15349	15.31869	2.90735078	3.093052149	0.007632962	6.027345657	144.6563	7.857015133	8.307359695	0.033676997	26.5957241	638.2974243	24	18950.25293	
Jul02	01	456.6076	780.2332764	3.089258	15.43235	3.13628745	3.399893284	0.008390178	6.537995815	156.9119	8.683890343	9.399373589	0.037860632	29.6246948	710.9926758	24	18725.59863	
	02	466.495	797.1282349	3.124617	15.3698	3.53041005	3.780904293	0.009330434	7.421407223	178.1138	8.895821571	9.459810257	0.038348913	30.6295547	735.109314	24	19131.07764	
	03	464.7114	794.0817261	3.097739	15.41737	4.10434532	4.4168396	0.010899788	8.654813766	207.7155	8.039690018	8.651242256	0.035071034	27.8513412	668.4321899	24	19057.96143	
	04	464.6783	794.0253296	3.091803	15.42787	4.0280329	4.342084408	0.010715309	8.512051582	204.2892	7.990881443	8.615502357	0.03492615	27.7348042	665.6353149	24	19056.60791	
	05	470.2937	803.6206665	3.129896	15.36045	3.82771182	4.089457989	0.010091879	8.087195396	194.0927	8.938428879	9.494000435	0.038487464	31.0080795	744.1939087	24	19286.896	
	06	354.1757	691.6599731	2.745363	14.05057	8.77703857	16.01559258	0.039522924	12.02590084	252.5439	7.238067627	8.031561852	0.032558937	24.3764534	511.9055176	20.25278	14008.03526	
	07	465.4429	795.3302612	3.123219	15.37229	4.8336072	5.158069134	0.012728967	10.12674046	243.0418	7.49087429	7.99516058	0.032411348	25.7789173	618.6940308	24	19087.92627	
	08	465.4616	795.3632813	3.075841	15.45613	5.09147978	5.517213921	0.013615271	10.83209133	259.9702	7.6396842	8.281685829	0.033572901	26.701068	640.8261108	24	19088.71875	
	09	464.9863	794.5512695	3.121819	15.37473	4.29019594	4.612647057	0.011382989	9.0216465	216.5195	8.760048866	9.317079544	0.037770249	30.0803909	721.9293823	24	19069.23047	
	10	460.9092	787.5844116	3.142614	15.33795	4.33948183	4.619897366	0.011400893	8.94867897	214.7683	8.623642921	9.122182846	0.036980178	29.2032871	700.8789063	24	18902.02588	
	11	465.1623	794.8515625	3.120675	15.37678	4.21833658	4.522866726	0.011161435	8.848869324	212.3729	8.986758232	9.568237305	0.038788415	30.9020004	741.6480103	24	19076.4375	
	12	463.7142	792.3776245	3.148211	15.32803	4.11817598	4.381306171	0.010812089	8.551118851	205.2269	9.337641716	9.849277496	0.03992768	31.6945591	760.6694336	24	19017.06299	
	13	458.1317	782.8386841	3.109102	15.39727	4.99449921	5.354831219	0.013214533	10.34584999	248.3004	7.806459427	8.370816231	0.033934221	26.5776463	637.8635254	24	18788.12842	
	14	454.4528	776.5528564	3.134284	15.35268	4.92995262	5.241167545	0.012934046	10.04784966	241.1484	7.378313065	7.84803772	0.031814948	24.7059669	592.9431763	24	18637.26855	
	15	461.5747	788.7206421	3.165063	15.2982	3.97159243	4.194165257	0.010350314	8.125152588	195.0037	9.134139061	9.602316856	0.038926549	30.8202209	739.6853027	24	18929.29541	
	16	468.1121	799.8934326	3.125475	15.36828	4.10307169	4.395172119	0.010846306	8.647432327	198.8909	9.037732124	9.608768463	0.038952753	31.2166214	717.9822998	24	19197.44238	
	17	464.569	793.8375854	3.106198	15.40239	4.71378374	5.065043926	0.012499413	9.92182827	238.1239	7.920661926	8.498380661	0.034451343	27.3582535	656.5980835	24	19052.10205	
	18	463.7421	792.4245605	3.102677	15.40863	4.89163542	5.25488472	0.012967892	10.28240013	246.7776	7.729828358	8.305805206	0.033670671	26.6838379	640.4121094	24	19018.16945	
	19	465.4235	795.2976074	3.132694	15.35551	4.0930562	4.374819756	0.010796079	8.553588867	205.2861	8.835719109	9.371628761	0.037991375	30.3010082	727.2241821	24	19087.14258	
	20	459.7859	785.6646118	3.098352	15.41629	4.48733711	4.827664839	0.011913579	9.360553741	224.6533	7.79453373	8.38630867	0.033997037	26.7122917	641.0949707	24	18855.95068	
	21	466.2664	796.7387085	3.100516	15.41246	4.73964643	5.094978809	0.012573283	10.02127075	240.5105	7.901212692	8.494641304	0.034436204	27.4435825	658.6459961	24	19121.729	
	22	467.2665	798.4474487	3.105921	15.4029	4.7420311	5.068718414	0.012557846	10.0282774	240.6787	7.890720844	8.469079971	0.034332562	27.4248753	658.1970215	24	19162.73877	
	23	465.7471	795.8514404	3.110883	15.39412	5.04728079	5.407958031	0.013345642	10.62103367	254.9048	7.648109913	8.194876671	0.033220984	26.4543991	634.9055786	24	19100.43457	
	24	464.764	794.1708984	3.06448	15.47624	5.09222221	5.552906036	0.013703344	10.86740303	260.8177	7.75574255	8.421920776	0.034141403	27.1486244	651.5670166	24	19060.10156	
	25	465.7142	795.7950439	3.088242	15.43417	4.4970355	4.891863823	0.012072031	9.568129539	229.6351	8.365929604	8.989046097	0.036440443	29.0755825	697.8140259	24	19099.08105	
	26	464.1757	793.1663208	3.071772	15.46331	4.98400688	5.407725811	0.013345075	10.58793545	254.1104	7.628396034	8.278933525	0.033561751	26.619154	638.8596802	24	19035.9917	
	27	463.8431	792.5982666	3.083981	15.44171	4.63439941	5.009762287	0.012362979	9.803103447	235.2745	7.811704636	8.444660187	0.034233592	27.1372871	651.2949219	24	19022.3584	
	28	463.9509	792.781311	3.108654	15.39805	4.81325579	5.161138058	0.012736541	10.09700489	242.3281	7.586423874	8.134652138	0.032976836	26.1506424	627.6154175	24	19026.75146	
	29	468.4478	800.4659424	3.126272	15.36688	4.45045424	4.767197132	0.011764384	9.391951561	225.4068	8.46353054	8.997428894	0.036474448	29.2562084	702.1489868	24	19211.18262	
	30	463.0963	791.3213501	3.133522	15.35405	4.48717976	4.800342083	0.011846184	9.345440865	224.2906	8.283408165	8.782562256	0.035603378	28.2338543	677.6124878	24	18991.7124	
	31	460.5851	787.0307617	3.069418	15.46748	5.08146334	5.517565727	0.013616113	10.72008228	257.282	7.348582268	7.98022604	0.03235082	25.4635124	611.1243286	24	18888.73828	
Aug02	01	464.6014	793.8939819	3.079466	15.44971	4.2052474	4.569702148	0.011277013	8.927897453	160.7021	10.38825607	11.09666252	0.04498446	35.97089	647.4760132	24	19053.45557	
	02	463.5169	792.0395508	3.113426	15.38961	3.94297552	4.242798328	0.010470296	8.26700592	198.4082	8.693114281	9.278288841	0.037612975	29.8591499	716.6196289	24	19008.94922	
	03	364.9165	712.6353149	2.795753	14.45899	5.81350231	9.539164543	0.023540525	11.47553635	240.9863	7.682982445	8.587262154	0.034811676	26.3185196	552.6889038	20.71667	14763.42864	
	04	469.7316	802.6581421	3.102297	15.40931	4.73980618	5.092264652	0.012566588	10.0684552	242.1229	8.088338852	8.691541672	0.035234395	28.2828712	678.7888794	24	19263.79541	
	05	470.2061	803.470459	3.111451	15.39312	4.72690058	5.063034534	0.012494435	10.03907394	230.6987	8.113851547	8.693763733	0.035243407	28.3109131	651.151001	24	19283.29102	
	06	473.4041	808.9346924	3.087739	15.43507	4.60778713	4.972632885	0.012271357	9.916714668	228.0844	8.249887466	8.906867981	0.036107305	29.1628914	670.746521	24	19414.43262	
	07	471.8054	806.2026367	3.09121	15.42892	4.71277666	5.081868649	0.012540909	10.11223221	242.6936	8.187015533	8.828808784	0.035790868	28.856842	692.564209	24	19348.86328	
	08	468.2859	800.1891479	3.116287	15.38456	4.73583078	5.065150738	0.01249967	10.00619793	240.1488	8.052886009	8.614559174	0.034922339	27.9488659	670.7726271	24	19204.53955	
	09	467.6382	799.0811157	3.155651	15.3149	4.13804913	4.3915205	0.010837295	8.640622139	207.3749	9.067362785	9.549902916	0.038714096	30.9897118	743.7531128	24	19177.94678	
	10	460.9942	787.7302246	3.109863	15.39592	4.61675024	4.948336124	0.012211395	9.620879855	230.8963	7.948113918	8.51984024	0.034538355	27.2112617	653.0703125	24	18905.52539	
	11	462.1642	789.7299805	3.117432	15.38253	4.89640522	5.234674931	0.012918	10.20526028	244.9263	7.949545383	8.500984192	0.034461904	27.2166623	653.2479248	24	18953.51953	
	12	465.3412	795.1567383	3.152217	15.32097	4.21912909	4.478502274	0.011051945	8.759861946	210.2367	9.004724503	9.49545002	0.038493343	30.6891003	736.5383911	24	19083.76172	
	13	464.1872	793.1851196	3.169197	15.2909	4.29751062	4.538034439	0.011198864	8.864472389	212.7473	8.982786179	9.424610138	0.038206153	30.3616543	728.6796875	24	19036.44287	
	14	464.1703	793.1568604	3.150247	15.32442	4.22363567	4.482560158	0.011061963	8.748726845	209.9695	9.1036129	9.611190796	0.038962547	30.975296	743.4071045	24	19035.76465	
	15	463.1893	791.4810181	3.139117	15.34413	4.29926014	4.589302063	0.011325374	8.939409256	214.5458	8.96720314	9.48703289	0.038459219	30.5080299	732.192688	24	18995.54443	
	16	462.8489	790.8988037	3.168306	15.29247	4.39782906	4.646877289	0.011467468	9.044200897	217.0608	8.873566628	9.305839539	0.0377247	29.9119053	717.8858812	24	18981.57129	
	17	458.1849	782.9278564	3.138481	15.34525	5.0331316	5.345443249	0.013191367	10.33012772	247.9231	7.620923519	8.094675064	0.032814775	25.6918755	616.6049805	24	18790.26855	
	18	458.593	783.6272583	3.144141	15.33523	4.52819681	4.800323009	0.011846137	9.284432411	222.8264	8.004076958	8.487112045	0.034405664	26.96208	647.0899048	24	18807.0542	
	19	461.7693	789.053833	3.135937	15.34976	4.54981804	4.835947037	0.011934037	9.417945862	226.0307	8.058768272	8.566413879	0.034727149	27.4038925	657.6934204	24	18937.29199	
	20	466.6871	797.4570313	3.210151	15.21838	3.51768994	3.6740942	0.009066857	7.237755775	173.7061	8.324272156	8.644780159	0.035044849	27.9481659	670.7559814	24	19138.96875	
	21	470.3081	803.644104	3.136513	15.34873	3.65681005	3.927328825	0.009691781	7.770664692	178.7253	8.495800972	9.026443481	0.03659204	29.407383	676.369812	24	19287.4585	
	22	468.7752	801.0247803	3.100071	15.41323	4.77430582	5.13241291	0.012665663	10.14615059	243.5076	8.133171082	8.749159813	0.035467979	28.4192123	682.0610962	24	19224.59473	
	23	469.9451	803.0244751	3.125761	15.36778	5.0255022	5.358908653	0.013224588	10.62752914	255.0607	8.053204536	8.58912468	0.034819212	27.968092	671.2341919	24	19272.5874	
	24	466.5472	797.2175903	3.127734	15.36429	5.06954098	5.403353214	0.013334284	10.63355637	255.2054	7.917429924	8.43872261	0.034209508	27.276104	654.6265259	24	19133.22217	
	25	467.8522	799.4473877	3.121692	15.37498	5.20197392	5.553431034	0.013704642	10.96172142	263.0813	7.962264538	8.502462387	0.034467906	27.5562916	661.3510132	24	19186.7373	
	26	468.0685	799.8182983	3.126145	15.36711	4.96492767	5.293036461	0.013062046	10.45358467	250.886	8.155590057	8.697169304	0.035257209	28.2036991	676.8887939	24	19195.63916	
	27	468.9586	801.3392334	3.151772	15.32175	3.9606216	4.211099625	0.010392064	8.298516273	199.1644	9.412528038	9.923837662	0.04022998	32.3139915	775.5358276	24	19232.1416	

	28	466.4808	797.1048584	3.028014	15.54076	4.03079605	4.442631721	0.010963415	8.713681221	200.4147	9.10608387	10.01711369	0.040608127	32.4350128	746.0053101	24	19130.5166
	29	466.0497	796.3677979	3.072343	15.46232	4.38717604	4.775953293	0.011785991	9.371669769	224.9201	8.550824165	9.265018463	0.0375592	29.9538994	718.8936157	24	19112.82715
	30	467.1009	798.1657715	3.138673	15.34493	4.26062775	4.545190811	0.011216521	8.922197342	214.1327	8.956077576	9.486060143	0.038455278	30.7632122	738.3170776	24	19155.97852
	31	365.3706	681.0690918	2.708472	13.73133	6.33359814	10.35783958	0.025560882	10.63767529	234.0289	6.971500397	7.666985512	0.031080963	23.5869141	518.9121094	21.02778	14321.37009
Sep02	01	463.4397	791.90802	3.108784	15.39783	5.29736471	5.678791046	0.014014	11.10525131	266.526	7.715362072	8.273975372	0.033541638	26.5660667	637.5855713	24	19005.79248
	02	463.0741	791.2838135	3.097464	15.41786	5.25094175	5.649526596	0.013941779	11.03675461	264.8821	7.739049911	8.329339027	0.033766076	26.7209702	641.3032837	24	18990.81152
	03	468.1593	799.9730225	3.127479	15.36473	4.48479414	4.804902077	0.011857431	9.462234497	227.0936	8.901861191	9.458046913	0.038341686	30.7308254	737.5397949	24	19199.35254
	04	465.228	794.9641113	3.083155	15.44318	5.12613869	5.543008804	0.013678913	10.87227917	260.9347	7.844932079	8.480617523	0.034379341	27.3380127	656.1123047	24	19079.13867
	05	474.4996	810.8075562	3.099244	15.41471	5.44649315	5.857180595	0.014454229	11.72252083	281.3405	8.157178879	8.774039268	0.035568833	28.8412037	692.1889038	24	19459.38135
	06	474.5849	810.9533691	3.098988	15.41516	5.28798532	5.686294079	0.014032513	11.38300037	273.192	8.159086227	8.77706149	0.03558087	28.85532	692.52771	24	19462.88086
	07	477.7752	816.4034424	3.096699	15.41921	4.80514908	5.171753407	0.012762746	10.42052746	250.0927	8.431902885	9.077857018	0.036800474	30.047575	721.1417847	24	19593.68262
	08	478.9013	818.328186	3.080271	15.4483	5.16434908	5.589016914	0.013792458	11.28942871	270.9463	8.304450989	8.988790512	0.036439404	29.8194714	715.6672974	24	19639.87646
	09	473.0438	808.3196411	3.078575	15.4513	4.73821688	5.135028362	0.012672109	10.25575924	246.1382	8.230630875	8.916795731	0.03614755	29.2284203	701.4821167	24	19399.67139
	10	472.1481	806.7893066	3.115777	15.38545	4.17302608	4.480336666	0.011056477	8.896446228	213.5147	9.037319183	9.64683342	0.039107062	31.6112213	758.6693115	24	19362.94336
	11	472.6923	782.4534302	3.120028	15.39208	4.03329325	4.340842724	0.010717117	8.386148453	184.4953	9.259493828	9.89111042	0.040118776	31.4194508	691.2279053	24	18778.88232
	12	468.4397	764.6414795	3.092567	15.44773	4.8625412	5.260311604	0.012991313	9.936922073	238.4861	8.101058006	8.765906334	0.03556335	27.1977882	652.7468872	24	18351.39551
	13	468.7997	765.2288818	3.097592	15.43886	5.28385067	5.707699776	0.014096233	10.78791142	258.9099	7.983408928	8.624788284	0.034990821	26.7783089	642.6793823	24	18365.49316
	14	466.4443	761.3859253	3.101597	15.43181	5.18893671	5.598121643	0.013825596	10.52853966	252.685	7.780862331	8.395140648	0.034059137	25.9399338	622.5584106	24	18273.26221
	15	466.6237	761.6773682	3.103059	15.42922	4.88050795	5.260377407	0.012991488	9.905073166	237.7218	7.912184238	8.533103943	0.034618866	26.3712883	632.9108887	24	18280.25684
	16	474.8488	775.1035156	3.105795	15.42439	5.0555501	5.446863174	0.01345205	10.42940998	250.3058	8.141282082	8.772537231	0.035590239	27.585762	662.0582886	24	18602.48438
	17	473.1023	772.2515259	3.09441	15.44447	5.01643944	5.424041748	0.013395688	10.35231304	248.4555	8.12283802	8.784578323	0.035639092	27.5258789	660.6210938	24	18534.03662
	18	472.9889	772.067688	3.104968	15.42585	4.170959	4.513895035	0.011147904	8.580237389	205.9257	9.019191742	9.695040703	0.039332874	30.4314671	730.3552246	24	18529.62451
	19	469.1731	765.8388062	3.121311	15.39704	3.96332502	4.275531769	0.010559218	8.062532425	193.5008	9.112201691	9.737230301	0.039504018	30.3096542	727.4317017	24	18380.13135
	20	463.687	756.883606	3.08907	15.45388	4.70387554	5.093451023	0.012579221	9.524915695	228.598	7.921564102	8.582769394	0.034820359	26.3645954	632.7503052	24	18165.20654
	21	464.0085	757.4083252	3.088051	15.45568	5.04505587	5.466739178	0.013501121	10.23036003	245.5286	7.71393013	8.359823227	0.033915851	25.6928673	616.6287842	24	18177.7998
	22	464.1593	757.6549072	3.096128	15.44144	5.16667986	5.582814693	0.013787796	10.45276451	250.8664	7.684836388	8.305984497	0.033697434	25.5361118	612.8666992	24	18183.71777
	23	466.8712	762.0809326	3.126588	15.38773	4.28908539	4.61170435	0.011389445	8.655894279	207.7415	8.808218002	9.401579857	0.038142294	29.1234913	698.9638062	24	18289.94238
	24	467.808	763.6100464	3.122964	15.39411	4.19862175	4.521206856	0.011165962	8.498936653	203.9745	8.920941353	9.530813217	0.038666595	29.589571	710.1497192	24	18326.64111
	25	467.3979	762.9420166	3.058418	15.50791	4.02978086	4.422690392	0.010922652	8.305837631	199.3401	9.03970623	9.86739254	0.040032063	30.6190548	734.8572998	24	18310.6084
	26	470.118	767.3814697	3.077242	15.47473	3.81340218	4.172286987	0.010304235	7.886901855	189.2856	9.206163406	9.977757454	0.040479809	31.1191254	746.8590088	24	18417.15527
	27	470.9918	768.8075562	3.101088	15.4327	4.19083071	4.521897793	0.011167675	8.587632179	206.1032	8.325065613	8.984600067	0.036450583	28.0254326	672.6104126	24	18451.38135
	28	439.9174	718.0845337	2.901531	14.47826	4.85888481	7.441662312	0.018378571	9.398927689	225.5743	7.746362686	8.41113472	0.034124032	26.0153904	624.3693848	24	17234.02881
	29	93.23896	608.5670166	2.529507	12.95707	5.06016016	7.764209747	0.019175168	7.783351421	46.70011	7.624264717	8.560773849	0.034731068	24.6015339	147.6091919	5.052778	3074.953891
	30	471.195	769.1394043	3.110882	15.41543	3.27905583	3.530630112	0.008719554	6.705432415	160.9304	8.929526329	9.601588249	0.038953755	29.9778881	719.4692993	24	18459.3457
Oct02	01	476.9728	778.5700684	3.081756	15.46677	3.98192501	4.324003696	0.010678933	8.315608978	199.5746	8.805517197	9.562194824	0.038793888	30.2053337	724.9279785	24	18685.68164
	02	475.8303	776.7044678	3.034784	15.54959	3.77332616	4.153560638	0.010257994	7.98499012	183.6548	9.094633102	10.02990246	0.040691365	31.5645142	725.9838257	24	18640.90723
	03	478.9701	781.8300171	3.072026	15.48392	4.23359966	4.61342144	0.011393704	8.912093163	213.8902	8.879921913	9.676218987	0.039256461	30.7012177	736.8292236	24	18763.92041
	04	418.1343	712.2030029	2.847454	14.28964	3.6293273	3.940731287	0.009732373	7.508668423	172.6994	8.174902916	8.876577377	0.036012355	27.7715092	638.744751	23	16380.66907
	05															0	0
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	25	333.9396	769.512085	3.103558	15.01852	9.61313915	14.53030682	0.035885286	16.44351768	279.5398	8.371715546	8.890855789	0.036070257	28.1269302	478.1578064	16.56667	12748.25089
	26	493.3274	805.2654419	3.215938	15.23019	3.977952	4.138240337	0.010220158	8.232797623	197.5872	8.742242813	9.097237587	0.036907557	29.7215328	713.3167725	24	19326.37061
	27	492.3304	803.6376343	3.211424	15.23817	4.25522184	4.433280945	0.010948816	8.801192284	211.2286	8.577373505	8.938216209	0.036262404	29.1457539	699.4981079	24	19287.30322
	28	493.524	805.5883179	3.192472	15.27157	4.4065733	4.617990017	0.011404984	9.188998222	220.536	8.48007679	8.888875008	0.036062233	29.0517159	697.2412109	24	19334.11963
	29	489.2913	798.6777954	3.195014	15.2671	4.14949608	4.345260143	0.010731442	8.57174778	205.7219	8.616325378	9.025383949	0.03661605	29.2475452	701.9411011	24	19168.26709

	30	484.4477	790.7719727	3.190056	15.27584	3.63057137	3.801680803	0.009388951	7.450195789	178.8047	8.67133522	9.09663868	0.036905129	29.1846371	700.4312744	24	18978.52734		
	31	491.9315	802.9874268	3.202902	15.2532	4.11133909	4.294592857	0.010606284	8.519950867	204.4788	8.812195778	9.20734024	0.037354253	29.9950409	719.8809814	24	19271.69824		
Nov02	01	495.6512	809.0593872	3.197306	15.26306	4.42692518	4.632104397	0.011439829	9.257385254	222.1772	8.861638069	9.275240898	0.037629724	30.444891	730.6774292	24	19417.42529		
	02	495.5133	808.835144	3.194382	15.26821	4.43519258	4.64538002	0.011472623	9.282221794	222.7733	8.864055138	9.306982994	0.037758503	30.5415878	732.9981079	24	19412.04346		
	03	493.2828	805.1937256	3.193555	15.26968	4.01229286	4.20298624	0.010380055	8.366859436	200.8046	8.849238396	9.27322197	0.037621535	30.2929287	727.0302734	24	19324.64941		
	04	493.2145	805.081543	3.203411	15.25228	4.32215357	4.514153481	0.01114854	8.976456642	215.435	8.832386017	9.226748466	0.037432987	30.1390533	723.3372803	24	19321.95703		
	05	489.3348	798.7497559	3.177401	15.29815	4.15013313	4.362330437	0.01077359	8.644867897	207.4768	9.399801254	9.945715904	0.040349826	31.8012753	763.2305908	24	19169.99414		
	06	491.0168	801.4940186	3.200283	15.25781	4.4453721	4.646446705	0.01147527	9.203765869	211.6866	8.607230186	9.000440598	0.03651486	29.2364122	673.0861206	24	19235.85645		
	07	486.7672	794.5567627	3.198535	15.2609	4.19046068	4.382074833	0.010822344	8.605991364	206.5438	8.23555851	8.617511749	0.034961302	27.7833633	666.8007202	24	19069.3623		
	08	480.7715	784.7718506	3.192535	15.27146	3.96496868	4.155343533	0.010262391	8.055716515	193.3372	7.698986053	8.070370674	0.032741554	25.6946621	616.671875	24	18834.52441		
	09	485.8783	793.1083984	3.218609	15.22549	4.30784321	4.477381229	0.011057726	8.77676487	210.6424	7.779271603	8.08830452	0.032814313	26.0273495	624.6563721	24	19034.60156		
	10	495.0858	808.1355591	3.200231	15.2579	5.02979183	5.260549545	0.012991904	10.4996624	251.9919	7.983092308	8.347619057	0.033866353	27.3696003	656.8704224	24	19395.25342		
	11	494.3649	806.9606323	3.189865	15.27618	5.37049723	5.632860184	0.013911388	11.22935009	269.5044	7.867351532	8.253643036	0.0334851	27.0219078	648.5258179	24	19367.05518		
	12	488.6701	797.6645508	3.205128	15.24927	4.82279539	5.035371304	0.012435787	9.933092117	238.3942	7.845727444	8.191987038	0.03923495	26.514967	636.3591919	24	19143.94922		
	13	490.7039	800.9829102	3.154826	15.33793	4.31976893	4.581185818	0.011314087	9.061447144	208.4133	7.935624123	8.41888237	0.034155454	27.350256	629.0559082	24	19223.58984		
	14	489.4807	798.9873047	3.200867	15.25677	4.20227909	4.402564526	0.010872959	8.673782349	208.1708	8.130310059	8.499534607	0.034482665	27.5586128	661.4066772	24	19175.69531		
	15	489.5026	799.0231934	3.210343	15.24005	4.22882795	4.407423973	0.010884949	8.703696251	208.8887	8.03937149	8.381459236	0.034003634	27.1755371	652.2128906	24	19176.55664		
	16	490.0117	799.8529053	3.214032	15.23358	4.43805218	4.619923592	0.011409746	9.137947083	219.3107	8.101057053	8.436097145	0.0342253	27.3876457	657.3035278	24	19196.46973		
	17	491.9319	802.9874268	3.197242	15.26317	4.1099081	4.300565243	0.010621049	8.532309532	204.7754	8.142711639	8.522674561	0.034576558	27.7671967	666.4127197	24	19271.69824		
	18	491.8187	802.8036499	3.190281	15.27544	4.19181538	4.397074699	0.010859406	8.721450806	191.8719	8.093296051	8.489233971	0.034440886	27.6602821	608.5261841	24	19267.2876		
	19	492.5887	804.0592041	3.189939	15.27604	4.39324236	4.60913372	0.011383105	9.148609161	192.1208	8.068119049	8.464749336	0.034341544	27.5952091	579.4993896	24	19297.4209		
	20	485.3437	792.2338257	3.207052	15.24587	4.01221752	4.18583107	0.010337689	8.190999985	188.393	8.011052132	8.360337257	0.03391793	26.8726215	618.0703125	24	19013.61182		
	21	482.5741	787.7136841	3.222194	15.21917	4.19649839	4.356246948	0.01075856	8.469002724	186.3181	7.988713264	8.297476768	0.033662908	26.4777718	582.5109863	24	18905.12842		
	22	481.6373	786.1843872	3.243476	15.18167	3.99671197	4.122532845	0.010181364	8.008198738	192.1968	8.003281593	8.258434296	0.033504516	26.3470535	632.3292847	24	18868.42529		
	23	490.7629	801.081665	3.237052	15.19296	3.81865072	3.947217941	0.009748385	7.811041355	187.465	8.270693779	8.550523758	0.034689546	27.7892876	666.9428711	24	19225.95996		
	24	492.0887	803.242981	3.222233	15.2191	3.9332788	4.084843636	0.010088284	8.10375309	194.4901	8.132377625	8.445788383	0.034264624	27.5232201	660.557312	24	19277.83154		
	25	492.8161	804.4313965	3.221153	15.221	3.72691488	3.870803356	0.009559665	7.694088936	184.6581	8.273554802	8.595571518	0.034872297	28.0523491	673.2564087	24	19306.35352		
	26	494.4483	807.0950928	3.071998	15.48397	3.83574724	4.179214001	0.01032135	8.325961113	183.1711	8.34113884	9.100780487	0.036921937	29.7741222	655.0307007	24	19370.26223		
	27	498.0603	812.9922485	3.133967	15.37472	3.7130847	3.957094193	0.009772774	7.947576523	190.7418	8.496292114	9.099655151	0.036917359	30.0130081	720.3121948	24	19511.81396		
	28	498.8625	814.3015137	3.218227	15.22616	3.96968532	4.127280712	0.010193085	8.302219391	199.2533	8.289611816	8.619714737	0.034970257	28.479229	683.5014648	24	19543.23633		
	29	501.1594	818.0504761	3.214603	15.23256	3.67079425	3.820920808	0.009436227	7.720727444	185.2975	8.335402489	8.677602768	0.035205085	28.8012161	691.229187	24	19633.21143		
	30	496.381	810.2523193	3.226178	15.21215	3.92055917	4.066252708	0.010042366	8.136955261	195.2869	8.048116684	8.348436356	0.033869669	27.4442368	658.6616821	24	19446.05566		
Dec02	01	496.7145	810.7946777	3.224651	15.21485	3.88017631	4.026319027	0.009943745	8.061974525	193.4874	8.050976753	8.355219841	0.033897188	27.4844341	659.6264038	24	19459.07227		
	02	496.4063	810.2926025	3.214603	15.23256	3.49877381	3.641788483	0.008994075	7.290576935	174.9738	8.317435265	8.658895493	0.035129208	28.4658699	683.1809082	24	19447.02246		
	03	495.8078	809.3149414	3.220009	15.22303	3.65282917	3.79528594	0.00937316	7.587433815	182.0984	8.263538361	8.588307381	0.034842819	28.2021084	676.8505859	24	19423.55859		
	04	492.5804	804.0456543	3.202903	15.2532	3.57349586	3.732644081	0.009218458	7.415092945	177.9622	8.303127289	8.675173759	0.035195228	28.3007545	679.2180786	24	19297.0957		
	05	488.9064	798.0501709	3.21382	15.23394	3.51684833	3.661465168	0.009042671	7.217201233	165.9956	8.344780922	8.690207481	0.035256233	28.1367645	647.1455688	24	19153.2041		
	06	484.088	790.1846313	3.212502	15.23625	3.22436452	3.358002186	0.008293212	6.554497242	157.3079	8.395178795	8.745567322	0.035480835	28.0372124	672.8931274	24	18964.43115		
	07	485.7858	792.9558105	3.226241	15.21203	3.4296155	3.557057381	0.008784817	6.967416286	167.218	8.240962029	8.54807663	0.034679595	27.5001907	660.0045776	24	19030.93945		
	08	486.6286	794.3325195	3.214794	15.23223	3.74535871	3.89800334	0.009626843	7.64845705	183.563	8.184843063	8.51980114	0.034564905	27.4578495	658.9884033	24	19063.98047		
	09	485.8821	793.112854	3.206018	15.24769	3.62468743	3.782596588	0.009341819	7.411943436	177.8866	8.277370453	8.64086628	0.035056051	27.8046207	667.3109131	24	19034.7085		
	10	487.5874	795.897644	3.209389	15.24173	3.62786841	3.782284498	0.009341055	7.436306953	178.4714	8.088974953	8.434810638	0.034220088	27.2356243	653.6549683	24	19101.54346		
	11	488.3405	797.1262207	3.189038	15.27764	3.6525104	3.832224607	0.00946439	7.545701027	181.0968	8.18484211	8.589064598	0.034845892	27.7766171	666.6387939	24	19131.0293		
	12	489.3019	798.6959839	3.197814	15.26216	3.61101532	3.778353691	0.009331351	7.456933975	178.9664	8.30694294	8.69362545	0.03527011	28.1749535	676.1989136	24	19030.93945		
	13	486.1758	793.5926514	3.200994	15.25656	3.4184854	3.572547913	0.008823073	7.004221916	168.1013	8.297880173	8.675757408	0.035197616	27.9324703	670.3792725	24	19168.70361		
	14	484.2504	790.4489746	3.198642	15.2607	3.46347785	3.622795343	0.008947166	7.074922562	169.7981	8.239737106	8.619726181	0.034970284	27.6429119	663.4299316	24	19046.22363		
	15	484.168	790.3145752	3.210088	15.24052	3.18430209	3.319553852	0.008198257	6.479801655	155.5152	8.190883636	8.539148331	0.034643386	27.3802624	657.1262817	24	18970.77539		
	16	483.1617	788.6733398	3.199531	15.25913	3.02039856	3.15913868	0.007802081	6.154131413	147.6992	8.35241127	8.737074852	0.035446368	27.9584084	671.0018311	24	18928.16016		
	17	489.5406	799.0858765	3.217084	15.22819	3.27778578	3.408532143	0.008418005	6.733453751	161.6029	8.517437935	8.860147476	0.035945684	28.7237911	689.3710327	24	19178.06104		
	18	497.3792	811.8798828	3.200739	15.257	4.12252188	4.31034708	0.010645207	8.644339561	207.4642	8.40582943	8.787956238	0.035652809	28.9484329	694.7623901	24	19485.11719		
	19	482.5219	787.6286011	3.097717	15.00323	4.24568367	6.339811802	0.015657343	8.70371151	208.8891	8.338579178	8.850672722	0.035907242	28.8030777	691.2738647	24	18903.08643		
	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0		
	21	5.24727	68.5215683	0.277778	9.960277	8.74413681	45.10516739	0.111395471	14.5618763	43.68563	2.174910069	6.934900761	0.028134892	6.52544308	19.57633018	2.219444	152.0797861		
	22	494.1914	806.6766357	3.177505	15.29797	6.11491108	11.11161518	0.027442116	9.648527145	231.5646	9.535787582	10.11901569	0.041052952	32.5442238	781.0614014	23.73889	19149.60767		
	23	504.7934	823.9834595	3.215812	15.23044	3.41450906	3.5524683	0.008773483	7.232021332	173.5685	9.187714577	9.561197281	0.038789839	31.9615421	767.0770264	24	19775.60303		
	24	505.7942	825.6158447	3.209897	15.24085	3.69453573	3.849956751	0.009508168	7.855418682	188.53	8.852893829	9.22843647	0.037439827	30.9157791	741.9786987	24	19814.78027		
	25	507.2065	827.9207764	3.20869	15.24298	3.80545378	3.96848011	0.009800901	8.121581078	194.9179	8.955280304	9.339870453	0.037891932	31.373991	752.975769	24	19870.09863		
	26	544.2944	888.460022	3.203601	15.25196	3.6075182	3.767955303	0.009305664	8.278013229	198.6723	8.788028717	9.179948807	0.037243117	33.0921326	794.2111816	24	21323.04053		
	27	533.9451	871.5674438	3.186495	15.28212	3.36919999	3.538300753	0.008738494	7.617007732	182.8082	8.462587357	8.887327194	0.036055963	31.4291077	754.298584	24	20917.61865		
	28	554.9373	905.8325806	3.171741	15.30814	2.58349919	2.724425077	0.006728476	6.104176998	146.5002	8.895186424	9.386160851	0.038079727	34.4942093	827.8609619	24	21739.98193		
	29	566.9695	925.4740601	3.217528	15.22738	2.93867159	3.055681229	0.007546577	6.987103462	167.6905	8.95416832	9.313266661	0.037784003	34.9684601	839.242981	24	22211.37744		
	30	566.8873	925.3395996	3.223506	15.21686	3.12515926	3.247396708	0.008020054	7.429111958	178.2987	8.816487312	9.151086715	0.037126027	34.355484	824.5316162	24	22206.15039		
	31	564.3025	921.1196899	3.23807	15.1912	2.84778452	2.95668745	0.007302091	6.727419853	161.4581	8.967523575	9.264072418	0.037584417	34.6222191	830.9332886	24	22106.87256		

Jan03	01	568.1017	927.3217773	3.197624	15.2625	3.34869123	3.503926992	0.008653602	8.029560089	192.7095	8.748441696	9.155659676	0.037144579	34.4474373	826.7385254	24	22255.72266	
	02	541.4922	883.8859253	3.20163	15.25544	3.41943908	3.573328257	0.008824996	7.827805519	187.8673	8.620936394	9.010925293	0.036557388	32.3375778	776.1019287	24	21213.26221	
	03	502.2774	819.8757324	3.211297	15.23839	3.20894384	3.343492985	0.008257378	6.771584988	162.518	8.605036736	8.9674263	0.036380917	29.8312874	715.9509277	24	19677.01758	
	04	497.673	812.3598022	3.211359	15.23828	3.85458112	4.016451836	0.00991937	8.056776908	193.3627	8.398834229	8.752222061	0.035507824	28.8524075	692.4578247	24	19496.63525	
	05	495.2835	808.458313	3.195397	15.2664	3.73518252	3.909559727	0.009655369	7.809442043	187.4266	8.497246742	8.899342537	0.036104698	29.1890793	700.5379028	24	19402.99951	
	06	497.3656	811.8574829	3.19826	15.26138	3.5615716	3.725712538	0.00920134	7.473157883	179.3558	8.582939148	8.980891228	0.036435537	29.5822792	709.9746704	24	19484.57959	
	07	501.2033	818.1223145	3.203601	15.25196	3.94965339	4.124123096	0.010185283	8.337833405	200.108	8.649395943	9.034791946	0.036654223	29.9900875	719.762085	24	19634.93555	
	08	498.5609	813.8082275	3.205574	15.24648	3.68208218	3.843295336	0.009491734	7.726778507	185.4427	8.689300537	9.071619034	0.036803614	29.9537258	718.8894043	24	19531.39746	
	09	492.4996	803.9156494	3.196268	15.2649	3.64805865	3.819131136	0.009432056	7.584517479	182.0284	8.511660576	8.910936356	0.036151737	29.0670795	697.6099243	24	19293.97559	
	10	492.2968	803.5838013	3.208307	15.24366	3.75855303	3.919564486	0.009680097	7.780775547	186.7386	8.346529007	8.706547737	0.035322513	28.3849049	681.2376709	24	19286.01123	
	11	495.7526	809.2252808	3.206653	15.24658	3.77524638	3.938892126	0.009727824	7.873731136	188.9695	8.354478836	8.71869278	0.035371788	28.6251793	687.0042725	24	19421.40674	
	12	496.6378	810.996521	3.21155	15.23794	3.9116559	4.074977398	0.010063918	8.16505146	195.9812	8.234602928	8.580677032	0.034811877	28.2365246	677.6765747	24	19463.9165	
	13	498.0879	813.0369263	3.192917	15.27079	3.98017716	4.170079231	0.010298794	8.378108025	201.0746	8.226494789	8.621928215	0.034979217	28.4417419	682.6018066	24	19512.88623	
	14	501.0003	817.7903442	3.171203	15.30907	4.05792141	4.281647205	0.010574326	8.639936447	190.0786	8.338710785	8.799440384	0.03569939	29.1643772	641.616272	24	19626.96826	
	15	501.7833	819.0685425	3.187257	15.28078	4.07429647	4.276929379	0.010562672	8.653300285	207.6792	8.336036682	8.752417564	0.035508603	29.0840836	698.0180054	24	19657.64502	
	16	498.5877	813.8531494	3.192472	15.27158	4.21706438	4.4196105	0.010915047	8.887898445	213.3096	8.414096832	8.819832802	0.035782121	29.1262455	699.0299072	24	19532.47559	
	17	499.0847	814.6647949	3.201311	15.256	4.08510685	4.27022934	0.010546131	8.593753815	206.2501	8.627773285	9.019146919	0.036590751	29.80937	715.4249268	24	19551.95508	
	18	498.9227	814.4001465	3.213332	15.2348	4.01086235	4.177062511	0.010316032	8.403468132	201.6832	8.773880005	9.137646675	0.037071496	30.1908951	724.5814819	24	19545.60352	
	19	498.8869	814.3419189	3.211169	15.23862	4.03200626	4.201031208	0.010375218	8.453048706	202.8732	8.752257347	9.120973587	0.037003871	30.134716	723.2332153	24	19544.20605	
	20	503.9474	822.602356	3.204111	15.25106	4.39258432	4.587556362	0.011329825	9.322191238	223.7326	8.807106018	9.198370934	0.037317865	30.7001286	736.8031006	24	19742.45654	
	21	497.8105	812.5841064	3.201884	15.25498	4.24154711	4.431117535	0.010943461	8.900525093	213.6126	8.499470711	8.88288784	0.036037933	29.2962074	703.1090088	24	19502.01855	
	22	491.9616	803.0366821	3.197752	15.26227	3.9480629	4.129934788	0.010199643	8.19492054	196.6781	8.329835892	8.717638969	0.035367526	28.4046917	681.7125854	24	19272.88037	
	23	491.2196	801.8259888	3.189312	15.27715	3.97726703	4.172471523	0.010304689	8.265860558	190.1148	8.14564991	8.546912193	0.034674902	27.804287	639.4985962	24	19243.82373	
	24	491.3814	802.0905151	3.210724	15.2394	4.00672817	4.175010681	0.010310964	8.271965027	198.5272	8.002010345	8.340993881	0.033839468	27.1425037	651.420105	24	19250.17236	
	25	491.1921	801.7811279	3.206209	15.24736	3.87238503	4.040809155	0.009979535	8.004043579	192.097	8.02983284	8.381201744	0.034002595	27.2629337	654.3104248	24	19242.74707	
	26	489.2774	798.6553345	3.201756	15.25521	3.98494697	4.164978981	0.010286196	8.215530396	197.1727	7.994537354	8.35578537	0.033899475	27.0757294	649.8175049	24	19167.72803	
	27	491.2476	801.8707275	3.209579	15.24143	3.87429333	4.03894186	0.009974921	8.000796318	192.0191	8.243506339	8.59522438	0.034870885	27.9629955	671.1118774	24	19244.89746	
	28	490.4091	800.5031128	3.219118	15.22459	3.86141706	4.013614655	0.009912364	7.936880112	190.4851	8.197402954	8.521855354	0.034573235	27.6761379	664.2272949	24	19212.07471	
	29	491.3273	802.0007324	3.193109	15.27045	4.40609884	4.618684292	0.011406687	9.150265694	219.6064	8.093267441	8.48187542	0.034411021	27.5980587	662.3533936	24	19248.01758	
	30	490.1051	800.005188	3.199341	15.25947	4.55808592	4.766968727	0.011772905	9.421466827	226.1152	8.052090645	8.422437668	0.03416989	27.3371506	656.0916138	24	19200.12451	
	31	489.5883	799.1621704	3.200676	15.25712	4.26444197	4.457773209	0.011009312	8.801673889	211.2402	8.246528625	8.621834755	0.034978841	27.9561672	670.947998	24	19179.89209	
Feb03	01	492.2975	803.5838623	3.216002	15.2301	3.7666595	3.920666218	0.009682816	7.78253603	186.7809	8.559250832	8.907097816	0.036136158	29.0400543	696.9613037	24	19286.0127	
	02	495.6729	809.0951538	3.204683	15.25005	3.63375163	3.792544127	0.009366393	7.585426807	182.0502	8.68341732	9.067866325	0.036788397	29.7663383	714.3920898	24	19418.28369	
	03	496.8187	810.9651489	3.192471	15.27159	3.62612033	3.800171614	0.009385235	7.618503571	182.8441	8.675309181	9.093677521	0.036893122	29.9239883	718.1757202	24	19463.16357	
	04	518.2139	845.8896484	3.173077	15.30578	3.4091804	3.593353033	0.008874455	7.506046772	172.6391	8.804812431	9.286417007	0.03767506	31.7646427	730.586792	24	20301.35156	
	05	494.8105	807.6871338	3.169452	15.31215	3.31514549	3.499691963	0.008643144	6.985121727	167.6429	8.900430679	9.397867203	0.038127214	30.7963676	739.112793	24	19384.49121	
	06	493.011	804.7497559	3.155079	15.3375	2.86426544	3.035219669	0.007496039	6.043982029	145.0556	9.106473923	9.659182549	0.039187379	31.5372124	756.8931274	24	19313.99414	
	07	487.0631	795.0410156	3.234698	15.19713	2.16250706	2.249365091	0.005555226	4.394720078	105.4733	9.472616196	9.800085068	0.039759036	31.6286507	759.0875854	24	19080.98438	
	08	494.4504	807.0995483	3.178608	15.29602	3.02213717	3.178754091	0.007850522	6.34844017	152.3626	9.091848373	9.572286606	0.038834836	31.3426838	752.2244263	24	19370.38916	
	09	494.107	806.5390625	3.174347	15.30352	3.04201078	3.204009056	0.007912898	6.393514633	153.4444	8.929206848	9.412953377	0.038188409	30.8032284	739.2775269	24	19356.9375	
	10	491.0628	801.5703735	3.162519	15.32437	2.88779497	3.053591728	0.007541412	6.054855347	145.3165	8.899636269	9.417342186	0.038206235	30.6257629	735.0183105	24	19237.68896	
	11	483.3272	788.9421387	3.16837	15.31407	2.45291996	2.590605497	0.006397981	5.050607204	121.2146	8.681034088	9.170084	0.0372031	29.356245	704.5499268	24	18934.61133	
	12	479.4619	782.6327515	3.193363	15.27	2.19668865	2.301625729	0.005684291	4.45003891	106.8009	8.583415031	8.995347977	0.036494173	28.5609263	685.4622803	24	18783.18604	
	13	481.4863	785.9378052	3.210214	15.2403	2.7758708	2.893240452	0.007145393	5.616786003	134.8029	8.323158264	8.676437378	0.035200357	27.6682587	664.038208	24	18862.50732	
	14	488.2588	796.9916992	3.22039	15.22235	3.489393	3.625522852	0.008953905	7.137611389	171.3027	8.142393112	8.461318016	0.034327637	27.3591003	656.6184082	24	19127.80078	
	15	320.0504	696.4927979	2.802225	13.83089	3.66484165	5.269482136	0.013013978	7.40119648	133.2215	7.274287701	8.078224182	0.032773424	24.5166664	441.2999878	17.65833	12298.90163	
	16	493.0306	804.781189	3.188655	15.27831	3.62977624	3.808535814	0.00940589	7.572444439	181.7387	8.078004837	8.477973938	0.034395184	27.6810532	664.3452759	24	19314.74854	
	17	497.4261	811.9562988	3.18484	15.28505	4.02723742	4.230072021	0.010446942	8.486763	203.6823	8.254636765	8.673844337	0.035189841	28.5720215	685.7285156	24	19486.95117	
	18	498.1678	813.1669312	3.175876	15.30084	4.17334509	4.395930767	0.010656563	8.831670761	211.9601	8.233650208	8.676088333	0.035198942	28.6226959	686.9447021	24	19516.00635	
	19	499.8296	815.880127	3.168243	15.31429	4.03582144	4.261843204	0.010525412	8.592227936	206.2135	8.488027573	8.965815544	0.036374383	29.6797791	712.3146973	24	19581.12305	
	20	500.5467	817.0505371	3.183505	15.28739	4.09973383	4.308595657	0.010640879	8.698624611	208.767	8.420138359	8.851631165	0.035911113	29.3426704	704.2241211	24	19609.21289	
	21	498.7445	814.1087036	3.187068	15.28112	4.1358242	4.340644836	0.010720026	8.73893261	209.7344	8.311076164	8.726390839	0.035403039	28.8278465	691.8682861	24	19538.60889	
	22	493.0634	804.835022	3.184205	15.28616	3.78542089	3.977269888	0.0098226	7.913868904	189.9328	8.305510521	8.72877121	0.03541268	28.5042629	684.1022949	24	19316.04053	
	23	489.4232	798.8931885	3.189675	15.27651	3.23976758	3.399244547	0.00839507	6.710642338	161.0554	8.479280472	8.896555901	0.036093395	28.8370342	692.0888062	24	19173.43652	
	24	486.9564	794.8661499	3.173332	15.30532	2.85838342	3.012203693	0.007439202	5.916830063	142.0039	8.575943947	9.043980598	0.036691487	29.1655922	699.9741821	24	19076.7876	
	25	490.734	801.0322266	3.190502	15.27506	3.0013113	3.145971298	0.007769563	6.229013443	149.4963	8.606310844	9.028004646	0.036626678	29.3372669	704.0944214	24	19224.77344	
	26	492.9124	804.5892568	3.186656	15.2783	3.31784844	3.480870008	0.008596655	6.91938591	166.0653	8.467197418	8.886730194	0.036053523	29.0088577	696.2125854	24	19310.11816	
	27	495.7945	809.2926025	3.174857	15.30262	3.43390846	3.618985891	0.008937757	7.23593998	173.6626	8.543034554	9.00514698	0.036533929	29.5665493	709.597229	24	19423.02246	
	28	493.8427	806.1085205	3.186114	15.28279	3.04455471	3.196466684	0.007894267	6.367889404	152.8293	8.576580048	9.008553505	0.036547758	29.4619827	707.0875854	24	19346.60449	
Mar03	01	493.4261	805.4268799	3.180283	15.2931	2.83819127	2.984941721	0.007371871	5.943510532	142.6443	8.629998207	9.081095695	0.036842078	29.6742039	712.1809082	24	19330.24512	
	02	493.8217	806.0726929	3.167861	15.31496	3.25711536	3.43997407	0.008495654	6.852087498	164.4501	8.432221413	8.907464027	0.03613764	29.1300163	699.1204224	24	19345.74463	
	03	491.8651	802.8798828	3.152599	15.34187	3.0477345	3.2340734	0.007987146	6.418384075	154.0412	8.607582092	9.137225151	0.03706979	29.763895	714.3334961	24	19269.11719	
	04	493.2831	805.1936477	3.171104	15.30924	2.95663548	3.119829893	0.007705002	6.206341743	148.9522	8.687074661	9.16798687	0.037194595	29.9493713	718.7849121	24	19324.65234	

	05	494.5421	807.2474976	3.174412	15.30342	3.33501863	3.51490593	0.008680717	7.009994984	168.2399	8.494226456	8.953990936	0.036326393	29.3274784	703.8594971	24	19373.93994	
	06	490.3488	800.4043579	3.176193	15.30027	3.24694037	3.41955328	0.008445224	6.767475128	162.4194	8.336353302	8.783324242	0.035633996	28.5261421	684.6273804	24	19209.70459	
	07	489.3764	798.8170166	3.176637	15.2995	3.36904216	3.547414064	0.008760999	7.003561497	168.0855	8.31330204	8.757637024	0.035529777	28.3934496	681.2028198	24	19171.6084	
	08	11.14835	145.5810089	0.58669	4.190834	6.13553381	27.84033394	0.068756662	10.63213348	31.8964	1.845493317	3.668166876	0.014881734	6.04439974	18.13319969	2.25	327.5572701	
	09	377.1535	777.5980835	3.113953	15.135	4.66852379	6.338570595	0.015654286	9.55351162	181.5167	7.983099461	8.652179718	0.035101943	27.0473995	513.9005737	18.89722	14694.44401	
	10	489.3539	798.7810669	3.185032	15.2847	3.76856756	3.958124876	0.00977532	7.817561626	187.6215	8.045572281	8.453300476	0.034295112	27.3970871	657.5300903	24	19170.74561	
	11	484.7691	791.2966919	3.191519	15.27327	3.4224596	3.58694911	0.008858633	7.019834518	168.476	8.066399574	8.45776844	0.034313243	27.1582336	651.7976074	24	18991.12061	
	12	479.9648	783.4534302	3.186644	15.28187	3.3258512	3.49112916	0.008621989	6.761960983	162.2871	7.933223248	8.330781937	0.033798046	26.4841785	635.6203003	24	18802.88232	
	13	477.4345	779.3233032	3.186305	15.28245	3.13899112	3.295782566	0.008139549	6.349602222	152.3905	8.019340515	8.422330856	0.034169454	26.6343327	639.223999	24	18703.75928	
	14	479.3357	782.4265747	3.183251	15.28782	2.98731995	3.136067152	0.007745098	6.076571796	145.8857	8.152886391	8.571017265	0.034772675	27.2086048	653.0064697	24	18778.23779	
	15	480.3348	784.0588989	3.201502	15.25567	2.86903405	2.998731613	0.007405926	5.809252262	139.422	8.29597187	8.672046661	0.035182547	27.5898209	662.1557007	24	18817.41357	
	16	488.6976	797.7092285	3.210724	15.2394	3.01625586	3.142462969	0.007760895	6.193722248	148.6493	8.753529549	9.123767853	0.037015196	29.528492	708.6837769	24	19145.02148	
	17	493.25	805.1400146	3.189674	15.27651	3.35298419	3.517060518	0.008686036	6.994822025	167.8757	8.659888268	9.085555077	0.036860164	29.679388	712.3052979	24	19323.36035	
	18	493.9177	806.2296753	3.189975	15.27775	3.56824994	3.742331743	0.009242386	7.456923962	178.9662	8.568313599	8.991765022	0.036479656	29.4122467	705.8939209	24	19349.51221	
	19	491.1266	801.673645	3.181787	15.2904	3.55537128	3.737215519	0.009229754	7.408361912	177.8007	8.463858604	8.901835442	0.036114808	28.9552002	694.9248047	24	19240.16748	
	20	490.0493	799.9155273	3.182488	15.28918	3.51769209	3.698192596	0.009133377	7.308364391	175.4008	8.321250916	8.749966621	0.035498668	28.3979301	681.550293	24	19197.97266	
	21	489.6644	799.2878418	3.188784	15.27808	3.77445292	3.959656239	0.00977911	7.823800564	187.7712	8.181026459	8.585408211	0.034831062	27.84412	668.2589111	24	19182.9082	
	22	482.9205	788.2786865	3.18624	15.26255	3.46681738	3.639839649	0.008989262	7.092465878	170.2192	8.112822533	8.520666122	0.034568392	27.2560291	654.1447144	24	18918.68848	
	23	484.6865	791.1621094	3.188911	15.27787	3.52611828	3.699536324	0.009136694	7.233582497	173.606	8.07514286	8.474127769	0.034379594	27.2023544	652.8565063	24	18987.89063	
	24	485.6897	792.7988892	3.196033	15.26531	3.59813929	3.76661706	0.00930236	7.378977299	177.0955	8.109483719	8.491220474	0.034448937	27.311779	655.4827271	24	19027.17334	
	25	484.9916	791.6599121	3.188465	15.27864	3.9669826	4.160899162	0.010276104	8.142836571	195.4281	7.9675107	8.362107277	0.033925138	26.8588409	644.6121826	24	18999.83789	
	26	482.3654	787.3728027	3.166271	15.31777	3.87397575	4.091469765	0.010104648	7.966769695	191.2025	7.861626625	8.308637619	0.033708204	26.5504131	637.2098999	24	18896.94727	
	27	489.4069	798.8661499	3.16888	15.31317	3.32500076	3.5122962	0.00867427	6.939419746	166.5461	8.456706047	8.93096447	0.036232974	28.9480324	694.7528076	24	19172.7876	
	28	484.5904	791.005127	3.1919	15.27259	3.0497992	3.195982933	0.007893075	6.248073578	149.9538	8.441919327	8.851096153	0.035908952	28.4068546	681.7645264	24	18984.12305	
	29	482.8302	788.1306152	3.18166	15.29062	3.18700457	3.349976301	0.008273388	6.529514313	156.7083	8.312507629	8.742847443	0.035469797	27.9503291	671.0479126	24	18915.13477	
	30	479.8548	783.274231	3.179563	15.29434	3.12436414	3.285794973	0.008114882	6.370098114	152.8824	8.183888435	8.612709999	0.034941822	27.3776875	657.0645142	24	18798.58154	
	31	471.9479	770.368103	3.168435	15.31395	2.71736407	2.868516207	0.007084334	5.476282597	131.4308	8.171965599	8.631315231	0.0350173	26.9817715	647.5625	24	18488.83447	
Apr03	01	476.5691	777.9107666	3.176192	15.30027	2.46823549	2.598323822	0.006417047	5.001983166	120.0476	8.572606087	9.032836821	0.036646284	28.5060463	684.1450806	24	18669.8584	
	02	489.6432	799.2519531	3.166317	15.31769	2.95965672	3.126913786	0.007722497	6.172114372	129.6144	8.751961708	9.251454353	0.037533209	29.9676094	629.3198242	24	19182.04688	
	03	492.9341	804.6240845	3.156989	15.33413	3.39130044	3.591720819	0.008870422	7.147434235	171.5384	8.726978302	9.25133419	0.037532728	30.1984043	724.7617188	24	19310.97803	
	04	493.2225	805.0950317	3.162392	15.3246	3.23056626	3.416847467	0.00843854	6.803204536	163.2769	8.763545036	9.273565292	0.037622921	30.2932949	727.0391235	24	19322.26076	
	05	495.401	808.6511841	3.156797	15.33447	3.43724537	3.64142251	0.008993176	7.280986309	174.7437	8.660682678	9.181181908	0.037248123	30.1205082	722.8922119	24	19407.62842	
	06	470.4703	801.3447876	3.150912	15.34483	3.3411653	3.544177055	0.008752994	7.031173706	161.717	8.591468811	9.124923706	0.037019875	29.6661949	682.3225098	24	19232.2749	
	07	487.3129	795.4490967	3.169004	15.31293	3.24121881	3.422068357	0.008451432	6.731145382	161.5475	8.262425423	8.725921631	0.035401125	28.1677628	676.0263062	24	19090.77832	
	08	480.747	784.7315063	3.171487	15.30857	2.98620677	3.147254944	0.007772733	6.120193005	146.8846	8.104077339	8.551206589	0.034692295	27.2258949	653.4215088	24	18833.55615	
	09	478.0636	780.3503418	3.213882	15.23382	2.73273206	2.847579956	0.00703263	5.497711658	131.9451	7.640108109	7.961900234	0.032301489	25.2316418	605.5593872	24	18728.4082	
	10	478.9398	781.7807617	3.26287	15.14745	2.99097705	3.06693697	0.007574371	5.925159454	142.2038	7.31137991	7.49882412	0.030422783	23.787508	570.9002075	24	18762.73828	
	11	481.7063	786.2965698	3.26179	15.14936	3.24217176	3.32394886	0.008209112	6.461840153	155.0842	7.31789875	7.508159161	0.030460654	23.9531536	574.8756714	24	18871.11768	
	12	480.8712	784.9332886	3.303719	15.07546	2.40262747	2.444508791	0.006037173	4.758455276	114.2029	7.923100471	8.025108337	0.032557912	25.5552082	613.3250122	24	18838.39893	
	13	482.2803	787.2338257	3.384525	14.933	2.18937421	2.163740873	0.00534376	4.209238052	101.0217	8.019975662	7.93062973	0.032174621	25.3297577	607.9141846	24	18893.61182	
	14	487.1952	795.2563477	3.3147	15.05609	2.49695659	2.524189949	0.006233957	4.957030773	118.9687	8.367728233	8.452571869	0.034292154	27.2701206	654.4829102	24	19086.15234	
	15	490.0717	799.9514771	3.258229	15.15565	2.96029329	3.040450811	0.007508958	6.008149147	144.1956	8.188975334	8.411047935	0.034123693	27.2995663	655.1895752	24	19198.83545	
	16	488.6042	797.5568237	3.246557	15.17623	3.05167294	3.145212173	0.007767688	6.200557232	142.6128	8.266921043	8.521585464	0.034572143	27.5686607	634.0792236	24	19141.36377	
	17	487.8823	796.3774414	3.260794	15.15111	3.25028086	3.334873199	0.008236093	6.561056137	157.4653	8.110173225	8.323472977	0.033768378	26.8922157	645.413208	24	19113.05859	
	18	489.6733	799.3012085	3.253904	15.16327	3.3097403	3.403204203	0.008404846	6.719760895	161.2743	8.122680664	8.354005814	0.033892263	27.0907173	650.1771851	24	19183.229	
	19	484.9477	791.5880127	3.260645	15.15139	2.99701786	3.074897528	0.007594031	6.016412735	144.3939	8.04477787	8.256628036	0.033497192	26.5179996	636.4320068	24	18998.1123	
	20	479.9637	783.4534302	3.257211	15.15744	2.60496163	2.674848318	0.006606037	5.182784557	124.3868	8.077687263	8.298961639	0.033668958	26.3793831	633.1052246	24	18802.88232	
	21	485.2964	792.1575317	3.265032	15.14365	2.55758405	2.620537519	0.006471904	5.129905224	123.1177	8.403445244	8.613509178	0.034945082	27.6840076	664.4161987	24	19011.78076	
	22	491.8759	802.8977661	3.263699	15.14601	3.13867259	3.216636658	0.007944082	6.393345604	153.2003	8.486911774	8.702219963	0.035304949	28.3465424	680.3170166	24	19269.54639	
	23	485.42	792.359436	3.245893	15.1774	2.94836879	3.038763285	0.007504791	5.948021412	142.7525	8.257657051	8.513280869	0.03453944	27.3672867	656.8148804	24	19016.62646	
	24	484.4806	790.8256836	3.250724	15.16886	3.0052855	3.092545033	0.007637616	6.047739506	145.1458	8.101534843	8.341034889	0.033839628	26.7685337	642.4448242	24	18979.81641	
	25	486.2495	793.7138062	3.251297	15.16787	2.89510965	2.978825092	0.007356764	5.84312582	140.235	8.19436076	8.434490204	0.034218784	27.1599827	651.8395996	24	19049.13135	
	26	7.401078	96.6473999	0.670533	9.267834	56.3708572	183.5942078	0.453420013	39.79786682	119.3936	1.453753352	3.576740026	0.014510867	3.05569649	9.167089462	2.244444	216.9196665	
	27	485.9092	793.1575317	3.236733	15.19354	3.52739048	3.797302961	0.009378137	7.078802109	169.8913	8.651936531	9.10896492	0.036955129	28.661129	687.8671265	24	19035.78076	
	28	491.1214	801.6644897	3.262553	15.14803	3.40067959	3.486666203	0.008610972	6.907983303	165.7916	8.346529007	8.562115669	0.03473657	27.8471794	668.3322754	24	19239.94775	
	29	492.0741	803.2207031	3.252822	15.16518	3.30719662	3.40164423	0.008400992	6.752142429	162.0514	8.539536476	8.785605431	0.035643276	28.6281376	687.0753174	24	19277.29688	
	30	492.0442	803.1713257	3.240866	15.18624	3.35997963	3.466467142	0.008561086	6.884412289	165.2259	8.496769905	8.773647308	0.035594758	28.5893288	686.1439209	24	19276.11182	
May03	01	487.7942	796.2338257	3.250789	15.16877	3.05425334	3.144589663	0.007766153	6.189330101	148.5439	8.426179886	8.674860001	0.03519398	28.0252285	672.6055298	24	19109.61182	
	02	487.7941	796.2338257	3.272027	15.13132	3.0089426	3.076923711	0.007598791	6.050608158	145.2146	8.41775322	8.610030174	0.034930967	27.8161335	667.5872192	24	19109.61182	
	03	484.4174	790.7226563	3.284174	15.1099	3.00957918	3.065729618	0.007571389	5.989844322	143.7563	8.31043911	8.468539238	0.034356933	27.167429	652.0183105	24	18977.34375	
	04	489.0605	798.3011475	3.275208	15.12572	3.57238173	3.648930788	0.009011716	7.19645977	172.715	8.223633766	8.403026581	0.03409113	27.2144413	653.1466064	24	19159.22754	
	05	485.8374	793.0410767	3.272282	15.13097	2.63707709	2.695904255	0.00665804	5.284172058	126.8201	8.470060349	8.662184715	0.035142548	27.8716049	668.9185181	24	19032.98584	
	06	482.731	787.9692993	3.270883	15.13334	2.97395835	2.427419186	0.005994963	4.729242325	113.5018	8.553845406	8.752232552	0.035507862	27.9794426	671.5065918	24	18911.28418	

	07	483.0687	788.520813	3.250787	15.16877	2.39107418	2.460453033	0.006076548	4.793624878	115.047	8.589776039	8.842445374	0.035873864	28.28792	678.9100952	24	18924.49951	
	08	488.4071	797.2340088	3.245064	15.17884	2.51831508	2.59608674	0.006411521	5.113736629	122.7297	8.80488205	9.080548286	0.036839847	29.3719082	704.9257813	24	19133.61621	
	09	490.316	800.350647	3.253332	15.16428	2.7550447	2.833709478	0.006998374	5.603521347	134.4845	8.703289986	8.953607559	0.036324844	29.0765343	697.836792	24	19208.41553	
	10	486.2444	793.7047119	3.258418	15.15532	2.71704626	2.789363861	0.006888854	5.474599838	131.3904	8.4745121	8.703344345	0.035309535	28.0296288	672.7111206	24	19048.91309	
	11	479.9725	783.46698	3.261281	15.15026	2.3952601	2.456711531	0.006067309	4.759749689	114.234	8.313937187	8.530685425	0.034609046	27.1216507	650.9196167	24	18803.20752	
	12	473.6844	773.2021484	3.261981	15.14903	2.28397179	2.342056274	0.005784146	4.479771614	107.5145	8.242712975	8.456140518	0.034306612	26.5317783	636.7626953	24	18556.85156	
	13	469.8217	766.8972168	3.272982	15.12962	2.13198256	2.179168224	0.005381859	4.133151531	99.19564	8.142711639	8.325501442	0.033776619	25.9079742	621.7913818	24	18405.5332	
	14	474.8159	775.0497437	3.218207	15.2262	2.06012034	2.141365051	0.0052885	4.102108955	98.45062	8.388341904	8.72232151	0.035386514	27.4287796	658.2907104	24	18601.19385	
	15	473.5139	772.9241333	3.233681	15.19893	2.3354826	2.417874098	0.00597139	4.621873379	110.925	8.174509048	8.461752892	0.034329388	26.5443916	637.0654297	24	18550.1792	
	16	475.0771	775.475769	3.25384	15.16337	2.40209699	2.469058752	0.006097804	4.734387875	113.6253	8.144618988	8.376038551	0.033981636	26.3573036	632.5753174	24	18611.41846	
	17	471.5858	769.776062	3.255175	15.16103	2.21099663	2.272752523	0.005612987	4.322846889	103.7483	8.192631721	8.423016548	0.034172237	26.307045	631.3690796	24	18474.62549	
	18	476.7055	778.1351929	3.246527	15.17628	2.31258869	2.382936716	0.005885107	4.592410812	109.9779	8.386592865	8.644576073	0.035071108	27.2918282	655.0039063	24	18675.24463	
	19	474.1153	773.906311	3.239595	15.1885	2.33961535	2.415576696	0.005965716	4.623262882	110.9583	8.250980377	8.522411346	0.034575488	26.7691383	642.4592896	24	18573.75146	
	20	467.572	763.2244873	3.240549	15.18682	2.23961329	2.311843634	0.005709529	4.363663197	104.7279	8.000738144	8.261879921	0.033518512	25.5901756	614.1641846	24	18317.3877	
	21	462.9423	755.6682739	3.198692	15.26061	2.18652081	2.285829067	0.005645281	4.268753052	98.18132	7.846425533	8.206944466	0.033295631	25.1537609	578.536499	24	18136.03857	
	22	458.3543	748.1793213	3.230692	15.20419	2.23913836	2.319497108	0.00572843	4.292776108	103.0266	7.73205471	8.009994507	0.032496598	24.3251705	583.8040771	24	17956.30371	
	23	456.4615	745.0895996	3.245892	15.1774	2.23564005	2.303461552	0.005688824	4.243189335	101.8365	7.730305195	7.969861058	0.032333851	24.09478	578.2747192	24	17882.15039	
	24	463.874	757.1884766	3.258864	15.15454	2.35074449	2.41321373	0.005959881	4.514696598	108.3527	7.992789745	8.208211899	0.033300772	25.2189865	605.2556763	24	18172.52344	
	25	473.9123	773.5743408	3.27788	15.12099	2.76728463	2.824265003	0.006975045	5.398953915	129.5749	8.12522316	8.295354843	0.033654325	26.0354214	624.8500977	24	18565.78418	
	26	470.5933	768.1572266	3.285002	15.10845	2.93533373	2.989631653	0.00738345	5.67441082	136.1859	7.743024826	7.887775421	0.032000773	24.5863171	590.0715942	24	18435.77344	
	27	466.4176	761.3410645	3.266814	15.14052	2.90687466	2.97693491	0.007352096	5.601016998	134.4244	7.619652271	7.804528236	0.031663012	24.1214962	578.9158936	24	18272.18555	
	28	458.4229	748.2914429	3.24481	15.17933	2.67076874	2.755442381	0.006805081	5.089549541	111.9701	7.723178387	7.961174965	0.032298543	24.1559048	531.4299316	24	17958.99463	
	29	460.3165	751.3811035	3.239214	15.18916	2.63564587	2.723104239	0.006725213	5.055459023	121.331	7.751609802	8.009635925	0.032495163	24.4232159	586.1572266	24	18033.14648	
	30	468.9421	765.4621582	3.278578	15.11977	2.81180167	2.86929822	0.007086265	5.429003716	130.2961	7.903757572	8.067213058	0.032728754	25.063921	601.5341187	24	18371.0918	
	31	465.5659	759.9509277	3.274254	15.1274	2.89065695	2.953097582	0.007293222	5.546582699	133.118	7.63380146	7.802170277	0.031653453	24.0572414	577.3737793	24	18238.82227	
Jun03	01	461.9482	754.0449219	3.26942	15.13592	2.83533049	2.900849104	0.007164191	5.406494141	129.7559	7.696125507	7.877635479	0.031959616	24.1020298	578.4487305	24	18097.07813	
	02	458.7834	748.8790283	3.266115	15.14174	2.97873449	3.051079512	0.007535209	5.646365643	135.5128	7.61265707	7.800098896	0.031645045	23.7028999	568.8696289	24	17973.09668	
	03	459.2747	749.6817627	3.294731	15.0913	2.65090871	2.69805336	0.006663348	4.99290514	119.8297	8.171806335	8.29140377	0.033638276	25.2306709	605.5361328	24	17992.3623	
	04	461.3951	753.1435547	3.289581	15.10037	2.71466136	2.76531291	0.006829457	5.140264034	123.3663	8.116797447	8.250482559	0.033472266	25.2240162	605.3764038	24	18075.44531	
	05	457.866	747.3811035	3.285956	15.10677	2.75917792	2.812184095	0.006945211	5.190775394	124.5786	7.732689381	7.870319366	0.031929951	23.875658	573.0158081	24	17937.14648	
	06	461.2883	752.9686279	3.280677	15.11607	3.14853048	3.210836172	0.007929757	5.968601975	143.2513	7.533163548	7.684129238	0.031174563	23.4798584	563.5166016	24	18071.24707	
	07	298.8136	650.223877	2.832892	13.58331	3.4717977	5.768866062	0.014247305	6.379286289	114.8271	7.028599262	7.773623466	0.031537645	21.8577099	393.4387817	17.41667	11324.73335	
	08	462.0089	754.1435547	3.279405	15.11833	3.12293291	3.186101675	0.00786867	5.935278416	142.4467	7.450332165	7.602703094	0.030844221	23.2640629	558.3375244	24	18099.44531	
	09	468.3162	764.4396362	3.302553	15.07751	2.90305662	2.94838953	0.007281594	5.55929184	133.423	8.279755592	8.380813599	0.034001041	26.013634	624.3319702	24	18346.55127	
	10	477.7934	779.9107056	3.29969	15.08256	3.43295383	3.479502201	0.008593279	6.703707695	160.889	8.003440857	8.118444443	0.032936588	25.6943207	616.6636963	24	18717.85693	
	11	479.9095	783.3638306	3.23667	15.19366	3.59039187	3.711834192	0.009167066	7.178049088	157.9171	8.000506401	8.27130127	0.033556741	26.2728367	578.0023804	24	18600.73193	
	12	480.4806	784.2966309	3.301911	15.07864	2.64598751	2.724100351	0.006727671	5.261548996	110.4925	8.833666801	8.925165176	0.036209449	28.449091	597.4309082	24	18823.11914	
	13	476.8049	778.2966919	3.281632	15.11439	3.55600762	3.624850035	0.008952242	6.970901012	167.3016	7.850495815	8.006991386	0.032484416	25.2856579	606.8557739	24	18679.12061	
	14	474.4919	774.520752	3.299946	15.0821	3.62389326	3.674285412	0.009074332	7.030783653	168.7388	7.701369286	7.809986591	0.031685166	24.5443039	589.0632935	24	18588.49805	
	15	474.9836	775.3233032	3.281377	15.11484	3.7914629	3.865159273	0.009545731	7.403841019	177.6922	7.785473824	7.940562248	0.03221491	24.979166	599.5	24	18607.75928	
	16	470.2748	767.6372681	3.292061	15.096	3.84376955	3.906453371	0.009647716	7.409385204	177.8253	7.597552299	7.725880623	0.031343944	24.0744743	577.7874146	24	18423.29443	
	17	465.2526	759.4398193	3.30675	15.0701	3.85012746	3.898508787	0.009628096	7.310050964	175.4412	7.476882458	7.563491821	0.030685145	23.3145008	559.5479736	24	18226.55566	
	18	468.3956	764.5698242	3.267771	15.13882	3.5518539	3.639618158	0.008988718	6.869203091	157.9917	7.939161301	8.128559113	0.032977626	25.2219296	580.1043701	24	18349.67578	
	19	474.3709	774.3233643	3.262172	15.14869	3.45854998	3.547937155	0.008762287	6.788365364	162.9208	8.124746323	8.336448669	0.033821028	26.1905994	628.5744019	24	18583.76074	
	20	478.2803	780.7047119	3.294796	15.09117	3.5851016	3.640054941	0.008989794	7.021129131	168.5071	8.184524536	8.313767433	0.033729009	26.3399372	632.1585083	24	18736.91309	
	21	478.5743	781.1846313	3.290343	15.09901	3.68112803	3.742107391	0.009241832	7.224019051	173.3765	8.171328545	8.310943604	0.033717558	26.3417759	632.2025757	24	18748.43115	
	22	476.5824	777.9331665	3.284175	15.1099	3.58780408	3.655949116	0.00902905	7.025026321	168.6008	8.069896698	8.223444939	0.033362579	25.9587116	623.0090942	24	18670.396	
	23	478.5577	781.1575928	3.286147	15.10642	3.41562366	3.477221966	0.008587646	6.715063095	161.1615	8.350026131	8.50374794	0.034499764	26.95047	646.8112793	24	18747.78223	
	24	478.5797	781.1934204	3.304462	15.07413	3.31975698	3.360081196	0.008298351	6.484145641	155.6195	8.292474747	8.400653839	0.034081519	26.6390991	639.3383789	24	18748.64209	
	25	471.7472	770.0407715	3.309995	15.06437	3.64281201	3.682357788	0.009094262	7.003526688	168.0846	7.819177628	7.905143261	0.032071222	24.700079	592.8018799	24	18480.97852	
	26	468.6431	761.7088013	3.305162	15.0729	3.75426126	3.802703381	0.009391483	7.159869671	171.8369	7.657648563	7.75402689	0.031458151	23.9674034	575.2177124	24	18281.01123	
	27	465.7772	760.2962036	3.314892	15.05575	3.68017411	3.718302488	0.009183039	6.977206707	167.453	7.840799332	7.91208601	0.032099392	24.4212418	586.1098022	24	18247.10889	
	28	463.2806	756.2199707	3.277117	15.12235	3.76046157	3.840025425	0.009483659	7.172436714	172.1385	7.51424551	7.673142433	0.031129988	23.5443211	565.0637207	24	18149.2793	
	29	466.8489	762.0450439	3.288881	15.1016	3.9378891	4.006245613	0.009894172	7.542702675	181.0249	7.710272789	7.846287727	0.031832442	24.2587585	582.2102051	24	18289.08105	
	30	470.5776	768.1304321	3.313874	15.05755	4.07843065	4.117159843	0.010168095	7.814644814	187.5515	7.781020641	7.858052254	0.031880178	24.4896297	587.7510986	24	18435.13037	
Jul03	01	473.522	772.9378052	3.304207	15.07459	4.693223	4.750644684	0.011732602	9.069876671	217.677	7.767984867	7.86862278	0.031923056	24.6807995	592.3391724	24	18550.50732	
	02	470.3823	767.8121948	3.295304	15.09027	4.68734121	4.758934498	0.011753077	9.035106659	216.8426	7.638093948	7.756874561	0.031469692	24.1665077	579.9962158	24	18427.49268	
	03	469.8021	766.8657837	3.295368	15.09017	4.66079044	4.731398106	0.011685084	8.964479446	215.1475	7.595645905	7.71445179	0.031297583	24.0061836	576.1483765	24	18404.77881	
	04	468.5166	764.7671509	3.302936	15.07684	4.11849356	4.172616005	0.010305052	7.885375023	189.249	7.651130676	7.752249718	0.031450946	24.0544872	577.3076782	24	18354.41162	
	05	364.8963	680.647644	2.938301	13.64628	3.37822413	3.48519659	0.008607341	6.428224087	134.9927	8.057091713	8.679925919	0.035214495	24.8910332	522.7116699	20.43333	13907.89959	
	06	472.0275	770.49823	3.305036	15.07313	3.32659221	3.367968321	0.008317823	6.41238308	153.8972	7.992469788	8.093625069	0.032635882	25.3038673	607.2927856	24	18491.95752	
	07	472.6098	771.4487915	3.315209	15.05519	3.93248343	3.966939926	0.009797101	7.562216282	181.4932	7.589921951	7.662412167	0.031086462	23.9830666	575.5936279	24	18514.771	
	08	478.0903	780.3952637	3.30459	15.07392	4.38224936	4.436771393	0.01095743	8.557125092	205.371	7.729510307	7.827918053	0.031757914	24.7869244	594.8862305	24	18729.48633	

	09	472.9612	772.0229492	3.289073	15.10127	4.44072819	4.51736021	0.01115647	8.613684654	198.1147	7.464035034	7.594089508	0.03080928	23.780592	546.9536133	24	18528.55078	
	10	469.9231	767.0632324	3.305989	15.07145	4.5437789	4.597844124	0.011355241	8.714592934	209.1502	7.280378819	7.370752335	0.0299032	22.9398041	550.5552979	24	18409.51758	
	11	468.9261	765.4353027	3.322269	15.04275	4.11849356	4.148514748	0.010245529	7.84981823	188.3956	7.360029697	7.414045811	0.030078828	23.0269971	552.6477051	24	18370.44727	
	12	467.4124	762.9644165	3.327418	15.03366	4.06491613	4.086706638	0.010092882	7.702685833	184.8645	7.253191948	7.295320034	0.02959718	22.5838089	542.0114136	24	18311.146	
	13	467.8654	763.7043457	3.32106	15.04488	4.17270851	4.203118324	0.010380385	7.931421757	190.3541	7.229504108	7.284861565	0.029554745	22.5717659	541.7224121	24	18328.9043	
	14	464.879	758.829895	3.319725	15.04723	4.04393101	4.075493813	0.010065192	7.640166283	183.364	7.239837646	7.299418449	0.02961378	22.4788132	539.4915161	24	18211.91748	
	15	463.8355	757.1258545	3.340075	15.01136	3.55378079	3.573870897	0.008826342	6.670620441	160.0949	7.750337124	7.753597736	0.0314564	23.8382835	572.1187744	24	18171.02051	
	16	462.4234	754.8208008	3.315399	15.05486	4.18018007	4.222711086	0.010428763	7.868436813	188.8425	7.294053555	7.358521938	0.029853575	22.5445251	541.0686035	24	18115.69922	
	17	462.009	754.1436768	3.334669	15.02088	4.24758959	4.27739048	0.010563816	7.945799351	190.6992	7.544133186	7.560076237	0.030671274	23.1548843	555.7172241	24	18099.44824	
	18	462.6039	755.1167603	3.329455	15.03008	4.29989672	4.333069801	0.010701317	8.059822083	193.4357	7.542543888	7.57171154	0.030718496	23.2228413	557.3482056	24	18122.80225	
	19	461.7362	753.6997681	3.278579	15.11976	4.38558769	4.475194931	0.011052336	8.33097744	199.9435	7.093254089	7.241191864	0.029377563	22.1457577	531.49823	24	18088.79443	
	20	461.8236	753.8430786	3.281697	15.11427	4.548388	4.637259007	0.011452584	8.6340065	207.2162	7.097865582	7.237577915	0.029362908	22.1394882	531.3477173	24	18092.23389	
	21	461.8931	753.9552612	3.286719	15.10542	4.25045204	4.331628799	0.010697769	8.060199738	193.4448	7.352558136	7.481807709	0.030353749	22.9034252	549.6821899	24	18094.92627	
	22	460.1208	751.0629883	3.292062	15.096	4.23518848	4.309827805	0.010643927	7.976272583	191.4305	7.352398872	7.469596863	0.030304216	22.788929	546.9343262	24	18025.51172	
	23	460.8877	752.3139648	3.27595	15.1244	4.31775427	4.413182735	0.010899176	8.184027672	196.4167	7.397073746	7.553421497	0.030644296	23.0800076	553.920166	24	18055.53516	
	24	461.5304	753.3632813	3.305161	15.0729	3.91229177	3.973586321	0.009813506	7.384560108	177.2294	7.623785973	7.709693909	0.031276294	23.5796623	565.9119263	24	18060.71875	
	25	464.2996	757.883667	3.326147	15.0359	3.82071757	3.864569939	0.009519629	7.205517769	172.9324	7.820130348	7.85909605	0.031884406	24.1799583	580.3189697	24	18189.20801	
	26	460.8324	752.2243652	3.310504	15.0635	4.84537125	4.898350239	0.012097379	9.095544815	218.2931	6.986417294	7.062203407	0.028651409	21.5714703	517.715332	24	18053.38477	
	27	457.8516	747.3587646	3.293078	15.0942	5.10690069	5.186421394	0.012808833	9.577450752	229.8588	6.774013042	6.885732174	0.027935462	20.877346	501.0563049	24	17936.61035	
	28	460.7174	752.0360107	3.302745	15.07717	4.33773565	4.402705669	0.010873305	8.163502693	195.9241	7.374656677	7.466046333	0.030289808	22.8001289	547.203125	24	18048.86426	
	29	459.137	749.4573975	3.2892	15.10104	4.74568844	4.835556507	0.011942307	8.936741829	214.4818	7.189757347	7.311561108	0.029663047	22.2487717	533.97052	24	17986.97754	
	30	460.3489	751.4350586	3.315782	15.05418	5.71374273	5.779728413	0.01427411	10.69876385	256.7703	6.922187328	6.979286671	0.028315021	21.3026581	511.2637939	24	18034.44141	
	31	461.9092	753.9821167	3.298674	15.08433	6.48831749	6.579104424	0.016248338	12.25234127	294.0562	6.645394802	6.743277073	0.02735753	20.6346283	495.2311096	24	18095.5708	
Aug03	01	461.9288	754.0135498	3.337595	15.01573	5.62773418	5.663029671	0.013985906	10.52370167	252.5688	6.956686497	6.965445518	0.028258858	21.3287964	511.8911133	24	18096.3252	
	02	278.0816	640.8156738	2.847149	13.31912	8.81754494	12.98725986	0.032074526	11.50559466	195.6121	7.010883331	7.493682861	0.030401917	20.7849884	353.3447876	16.26944	10425.71441	
	03	465.4996	759.8432617	3.3278	15.033	4.60721302	4.629865646	0.011434311	8.692564964	208.6216	6.865746498	6.904810905	0.028012875	21.2875423	510.901001	24	18236.23828	
	04	466.8052	761.9733276	3.326084	15.03602	3.97556782	3.999341726	0.009877113	7.528648376	180.6876	7.21567297	7.261416912	0.029459612	22.4574795	538.9794922	24	18287.35986	
	05	470.0086	767.2020874	3.321378	15.04432	4.00450325	4.032783985	0.00995971	7.644971848	183.4793	7.323463917	7.380727291	0.029943662	22.9805031	551.5321045	24	18412.8501	
	06	470.5304	768.0542603	3.325067	15.03782	3.69050789	3.721362829	0.009190594	7.052993774	169.2719	7.588808537	7.630017281	0.030955037	23.7916088	570.9985962	24	18433.30225	
	07	468.1074	764.098999	3.319597	15.04745	3.99082994	4.021904945	0.009932841	7.596101284	182.3064	7.234591484	7.294481277	0.029593751	22.6175919	542.8222046	24	18338.37598	
	08	469.0081	765.5698242	3.327609	15.03333	3.91753793	3.94228363	0.009736203	7.452171803	178.8521	7.401843071	7.440508842	0.030186187	23.1210365	554.9049072	24	18373.67578	
	09	465.2033	759.3588867	3.315273	15.05508	4.17684221	4.214342594	0.010408103	7.907526016	189.7806	7.036973476	7.103814125	0.02882022	21.8894501	525.3468018	24	18224.61328	
	10	464.5579	758.3051758	3.315527	15.05462	4.20100784	4.239019394	0.010469052	7.939066887	190.5376	7.039835453	7.105727196	0.028827978	21.8645496	524.7492065	24	18199.32422	
	11	469.2616	765.9825439	3.297021	15.08725	4.79847145	4.869086266	0.012025117	9.214917183	221.158	7.094843864	7.201597691	0.029216941	22.3805618	537.1334839	24	18383.58105	
	12	469.7802	766.8300171	3.324302	15.03915	3.62150955	3.659845352	0.009038669	6.925543308	166.213	7.830624104	7.873221397	0.031941727	24.5095177	588.2283936	24	18403.92041	
	13	466.2967	761.1437378	3.30637	15.07077	4.10672951	4.155299187	0.010262287	7.812527657	187.5007	7.311222076	7.40010643	0.030022291	22.8531342	548.4752197	24	18267.44971	
	14	464.3484	757.9644165	3.295114	15.09061	4.3564949	4.423665524	0.010925067	8.282491684	198.7798	7.163364887	7.275515079	0.029516809	22.3763218	537.0316772	24	18191.146	
	15	467.7086	763.4486084	3.315146	15.05529	3.98542404	4.027733326	0.009947236	7.589922428	182.1581	7.613610268	7.681331158	0.031163208	23.8016968	571.2407227	24	18322.7666	
	16	465.044	759.098877	3.26675	15.14063	4.14567995	4.246716499	0.010488058	7.962600231	191.1024	7.290235519	7.466873169	0.030293163	23.0009327	552.0223999	24	18218.37305	
	17	464.2171	757.7491455	3.280995	15.1155	4.0000515	4.07858181	0.01007282	7.636242867	183.2698	7.413926125	7.562496662	0.0306811	23.2498169	557.9956055	24	18185.97949	
	18	462.162	754.3947754	3.277816	15.12111	3.98860407	4.071503162	0.010055334	7.588041782	182.113	7.382445812	7.536752701	0.030576654	23.0723381	553.736084	24	18105.47461	
	19	463.6157	756.7670288	3.306115	15.07123	3.5682478	3.615785837	0.00892986	6.750701904	162.0168	7.755743504	7.846305847	0.031832512	24.1049824	578.5195923	24	18162.40869	
	20	463.8931	757.2200317	3.301092	15.08009	3.30518293	3.353642941	0.008282447	6.269677639	150.4723	7.956593037	8.063246727	0.032712657	24.7741699	594.5800781	24	18173.28076	
	21	466.1292	760.8702393	3.356734	14.98198	2.47491217	2.483811617	0.006134239	4.651433945	111.6344	8.648599625	8.608546257	0.034924943	26.5996876	638.3925171	24	18260.88574	
	22	465.0113	759.045105	3.350186	14.99353	3.51546574	3.524439573	0.008704259	6.600004673	158.4001	7.677045345	7.659015656	0.031072674	23.6032124	566.4771118	24	18217.08252	
	23	461.0998	752.6502686	3.333142	15.02357	4.09369326	4.109211445	0.010148458	7.640585423	183.3741	6.993412971	7.022408962	0.028489958	21.4474297	514.7382813	24	18063.60645	
	24	458.6926	748.7310181	3.33575	15.01897	4.44457293	4.456718922	0.0110067	8.24581337	197.8995	6.798336506	6.820785999	0.027671967	20.7221584	497.3317871	24	17969.54443	
	25	459.3105	749.7399292	3.337467	15.01595	3.88907886	3.907395124	0.009650043	7.222014427	173.3283	7.259392262	7.272574425	0.029504891	22.1414909	531.395813	24	17993.7583	
	26	459.3735	749.8431396	3.248672	15.17249	4.02161455	4.152746201	0.010255973	7.673792839	168.8234	7.302015781	7.524085522	0.030525263	22.926878	504.3912964	24	17996.23535	
	27	462.0112	754.1480103	3.257975	15.15609	5.17876244	5.32339716	0.013147122	9.910595894	237.8543	6.926160812	7.112839222	0.028856838	21.7737122	522.5690918	24	18099.55225	
	28	465.9149	760.5204468	3.28691	15.10508	5.28893852	5.382450581	0.013292963	10.11664963	242.7996	7.030454636	7.15827179	0.029041158	22.0865955	530.0783081	24	18252.49072	
	29	468.3987	764.5742798	3.297021	15.08726	5.16429424	5.239715099	0.01294045	9.900104523	237.6025	7.191187382	7.29938221	0.029613649	22.6417084	543.401001	24	18349.78271	
	30	359.2666	670.079834	2.906492	14.03411	7.15865993	10.3292284	0.025509952	12.38116455	260.0045	7.2916646	7.882723331	0.031980276	22.5181618	472.8814087	20.225	13552.3649	
	31	466.4478	761.3903809	3.292444	15.09533	4.48447704	4.557304859	0.0112551	8.572810173	205.7475	7.220759869	7.339346886	0.02977578	22.6741619	544.1799316	24	18273.36914	
Sep03	01	464.9398	758.9285278	3.290408	15.09892	4.46603441	4.54092741	0.011214659	8.515420914	204.3701	7.18037653	7.302911282	0.029627966	22.4883842	539.7211914	24	18214.28467	
	02	464.3107	757.9016113	3.313237	15.05867	3.79178166	3.838731766	0.009480463	7.173766136	172.1704	7.619175434	7.687089443	0.031186579	23.6587448	567.8098755	24	18189.63867	
	03	460.9913	752.484436	3.311331	15.06203	3.91292667	3.961973429	0.009784834	7.3498559	176.3965	7.389919758	7.46207571	0.030273691	22.799612	547.1906738	24	18059.62646	
	04	463.1371	755.9866943	3.282281	15.11325	3.90460491	3.985404015	0.009842691	7.431555271	170.9258	7.45933342	7.602118969	0.030841848	23.3252048	536.4796753	24	18143.68066	
	05	466.36	761.2468872	3.300774	15.08068	4.14838457	4.21791935	0.010416938	7.926510811	190.2363	7.505977631	7.602852821	0.030844834	23.4975624	563.9415283	24	18269.92529	
	06	464.121	757.5922241	3.3147	15.05609	4.80101442	4.845723629	0.011967425	9.069618225	217.6708	6.997704029	7.065042496	0.02866292	21.7178955	521.2294922	24	18182.21338	
	07	465.3655	759.6234741	3.325003	15.03792	4.11674643	4.142635822	0.010231003	7.77458477	186.59	7.210426807	7.257371902	0.029443201	22.3699379	536.878479	24	18230.96338	
	08	469.5629	766.475708	3.317753	15.05071	3.9175384	3.949988842	0.009755233	7.483239174	179.5977	7.582131386	7.648218632	0.031028884	23.7846584	570.8317871	24	18395.41699	
	09	473.6016	773.0678101	3.31788	15.05049	3.75330663	3.784132957	0.009345622	7.22795105	173.4708	7.86051321	7.928584099	0.032166325	24.8677254	596.8253784	24	18553.62744	

	10	468.2743	764.3724365	3.234612	15.19729	3.99090576	4.131540775	0.010203614	7.794937611	163.6937	7.337818146	7.590597153	0.030795105	23.5222244	493.9667053	23.93889	18298.22657
	11	467.368	762.8926392	3.236734	15.19354	3.91335092	3.949927092	0.009755089	7.433492661	178.4038	7.552453518	7.803651333	0.031659465	24.1683407	580.0402222	24	18309.42334
	12	463.7117	756.9238892	3.193404	15.26992	4.03538752	4.226033211	0.010436978	7.899887085	181.6974	7.274634838	7.626104832	0.030939166	23.4045963	538.3057251	24	18166.17334
	13	461.8926	753.9553223	3.25772	15.15654	3.9555347	4.061330795	0.010030207	7.563200474	181.5168	7.363208771	7.572227955	0.030720584	23.1711044	556.1065063	24	18094.92773
	14	461.3676	753.0988159	3.289137	15.10117	4.18129396	4.254638672	0.010507618	7.91342783	189.9223	7.181808472	7.307606697	0.029647013	22.329504	535.9080811	24	18074.37158
	15	464.0439	757.4665527	3.269845	15.13516	4.16475868	4.262531757	0.010527118	7.975408554	191.4098	7.412124634	7.587265968	0.030781591	23.3162174	559.5891724	24	18179.19727
	16	468.4948	764.7314453	3.293905	15.09275	3.89877701	3.962725878	0.009786692	7.485017776	179.6404	7.669891357	7.792665005	0.031614918	24.1795425	580.309021	24	18353.55469
	17	473.2065	772.4221191	3.32665	15.03501	3.47112417	3.500259161	0.008644538	6.661690712	146.5572	7.998366356	8.042167664	0.032627136	25.1841583	554.0515137	24	18538.13086
	18	469.7856	766.8369893	3.320869	15.04522	3.89273667	3.921996593	0.009666105	7.431152344	178.3477	7.683245659	7.743731499	0.031416375	24.0969372	578.3264771	24	18404.13574
	19	467.3568	762.8746948	3.311711	15.06136	3.99687004	4.037749767	0.009971978	7.609780312	182.6347	7.609476089	7.689518452	0.031196421	23.8017826	571.2427979	24	18308.99268
	20	466.8213	762.0003052	3.301918	15.07863	3.93645716	3.989570856	0.009852985	7.508671761	180.2081	7.603594303	7.706689835	0.031266104	23.8299007	571.9176025	24	18288.00732
	21	463.025	755.8029175	3.291362	15.09723	4.00164032	4.068014145	0.01004672	7.593997955	182.256	7.559396267	7.685231686	0.031179037	23.5714378	565.7144775	24	18139.27002
	22	464.2911	757.8702393	3.2333	15.1996	3.45817947	3.578864098	0.009838672	6.691874981	160.605	8.05988121	8.345041275	0.033855889	25.6693916	616.0654297	24	18188.88574
	23	463.2306	756.1390991	3.238388	15.19063	4.21801949	4.356684685	0.010759639	8.136608124	195.2786	7.542225838	7.795299053	0.031625584	23.9184952	574.0438843	24	18147.33838
	24	466.7857	761.9420166	3.302045	15.07839	4.75681686	4.823788643	0.011913245	9.074188232	217.7805	7.513926506	7.612466335	0.030883824	23.539463	564.9470825	24	18286.6084
	25	467.7114	763.453186	3.308468	15.06707	5.29386616	5.352777004	0.01321967	10.09683609	242.3241	7.208518028	7.291404247	0.029581284	22.5859127	542.0618896	24	18322.87646
	26	465.8954	760.4889526	3.304653	15.0738	5.50293112	5.570491314	0.013757367	10.46829128	251.239	7.107404232	7.197730064	0.029201241	22.2116203	533.0789185	24	18251.73486
	27	373.1096	664.3022461	2.916736	13.85771	4.79069471	6.777781963	0.016739015	8.867038727	195.0749	6.797717571	7.448176861	0.030217299	20.9713421	461.3695068	21.41944	14228.98418
	28	463.7693	757.0180664	3.306242	15.071	4.43105841	4.483105183	0.011071867	8.391863823	201.4047	7.269567966	7.357721806	0.029850321	22.6021881	542.4525146	24	18168.43359
	29	466.5717	761.5921021	3.324113	15.0395	3.72914171	3.752802849	0.009268244	7.06294632	169.5107	7.599460602	7.650811195	0.0310394	23.6403866	567.3693237	24	18278.21045
	30	468.3055	764.421936	3.316736	15.0525	4.16650915	4.20220232	0.01037813	7.93888998	190.5334	7.506613255	7.573989391	0.030727725	23.4918633	563.8046875	24	18346.12646
Oct03	01	470.5609	768.1035156	3.30249	15.07762	4.13200855	4.186004639	0.010338127	7.942724228	190.6254	7.61869812	7.720398903	0.031321719	24.0586662	577.40802	24	18434.48438
	02	472.5853	771.4086304	3.311902	15.06101	3.88574123	3.926431179	0.009697059	7.483045578	179.5931	7.897557735	7.980189323	0.032375675	24.9749298	599.3983154	24	18513.80713
	03	471.7694	770.0766602	3.336449	15.01775	3.76491213	3.775941133	0.009325393	7.185564518	172.4536	7.933645725	7.958353996	0.032287106	24.8692455	596.8618774	24	18481.83984
	04	468.3214	764.4488525	3.345989	15.00092	3.63677216	3.636713028	0.008981536	6.871160507	164.9079	7.744931221	7.746188641	0.03142634	24.0282536	576.6781006	24	18346.77246
	05	467.6016	763.2738037	3.349105	14.99543	3.55950499	3.555948257	0.008782073	6.705305576	160.9273	7.734279156	7.728191853	0.031353328	23.9336586	574.4077759	24	18318.57129
	06	466.783	761.9375	3.338293	15.01449	3.59495831	3.602544069	0.008897157	6.782817841	162.7876	7.706139565	7.725035667	0.031340517	23.8817749	573.1625977	24	18286.5
	07	465.6844	760.1437378	3.328182	15.03232	3.43581367	3.452826262	0.008527396	6.485004902	155.6401	7.743022919	7.785982132	0.031587787	24.012804	576.307312	24	18243.44971
	08	466.7638	761.9060059	3.32778	15.03303	3.52972126	3.54867959	0.008764125	6.679221153	160.3013	7.775351048	7.81872797	0.031720627	24.1702671	580.0864258	24	18285.74414
	09	468.3376	764.475769	3.33556	15.01932	3.38319039	3.394089222	0.008382337	6.409604549	153.8305	7.907889843	7.933772087	0.03218738	24.6100922	590.6422119	24	18347.41846
	10	478.2474	780.6508179	3.332825	15.02413	3.48986959	3.50353837	0.008652641	6.756952286	162.1669	8.353523254	8.387851715	0.034029573	26.5666046	637.5985107	24	18735.61963
	11	477.5056	779.4401245	3.34408	15.00428	3.6203959	3.622467995	0.008946361	6.976821899	167.4437	8.217750549	8.224168777	0.033365503	26.0154743	624.3713989	24	18706.56299
	12	475.9508	776.9018555	3.33664	15.0174	3.71848965	3.728889942	0.009209186	7.157735348	171.7856	8.030467987	8.054206848	0.032675963	25.3897119	609.3291016	24	18645.64453
	13	478.1705	780.5259906	3.323922	15.03983	3.78780675	3.812842131	0.009416525	7.352931499	176.4704	8.123791695	8.179031372	0.033182397	25.9014034	621.633667	24	18732.60938
	14	478.3077	780.7495728	3.319916	15.04689	4.14377308	4.176455975	0.010314537	8.053012848	193.2723	8.054475784	8.11876297	0.032937866	25.723341	617.3602295	24	18737.98975
	15	478.3786	780.8661499	3.288608	15.1021	3.54704165	3.603233576	0.008898851	6.95650816	159.9997	8.090459824	8.233083725	0.033401679	26.0671654	599.5447998	24	18740.7876
	16	480.8795	784.9467773	3.328628	15.03152	3.95251465	3.979097128	0.009827126	7.701198578	184.8288	8.042867661	8.085001945	0.032800913	25.7578506	618.1884155	24	18838.72266
	17	478.4041	780.9064331	3.284811	15.10878	4.78622913	4.874116898	0.012037538	9.407309532	225.7754	7.749860287	7.894787312	0.032029212	25.0171413	600.411377	24	18741.75439
	18	471.3327	769.3636475	3.28551	15.10755	4.00275278	4.074259758	0.01006215	7.754772186	186.1145	7.686425686	7.828268051	0.031759351	24.442337	586.6160889	24	18464.72754
	19	471.1048	768.9914551	3.315782	15.05419	3.83279967	3.86741662	0.00955131	7.347999096	176.352	7.563370705	7.633272648	0.030968238	23.8174	571.6176147	24	18455.79492
	20	469.4094	766.2244873	3.306435	15.07067	3.89830041	3.944489241	0.00974165	7.469033718	179.2568	7.518379211	7.608852386	0.030889171	23.6594715	567.8272705	24	18389.3877
	21	468.8625	765.3320923	3.283764	15.11062	4.1797719	4.260920525	0.010523137	8.048471451	185.1149	7.443462849	7.58427906	0.030769473	23.5381966	541.378479	24	18367.97021
	22	470.5744	768.1259766	3.295241	15.0904	4.70466995	4.775605679	0.01179425	9.063681602	217.5284	7.427279472	7.542269707	0.030599041	23.5069752	564.1674194	24	18435.02344
	23	475.0466	775.4265137	3.318644	15.04913	4.83630896	4.875701427	0.012041458	9.340875626	224.181	7.560510159	7.624074936	0.030930912	23.9852619	575.6463013	24	18610.23633
	24	472.4807	771.2379761	3.327355	15.03378	4.61897659	4.64521122	0.011472225	8.852444649	212.4587	7.503274441	7.546690941	0.030616984	23.6182632	566.8383179	24	18509.71143
	25	472.9064	771.9331055	3.311647	15.06147	5.03186131	5.084565163	0.012557275	9.694773674	232.6746	7.357644558	7.434376717	0.030161312	23.2860203	558.864502	24	18526.39453
	26	475.33	775.8883057	3.28583	15.107	5.22216415	5.314263821	0.013124563	10.19019604	244.5647	7.45812273	7.596343517	0.030818412	23.9138584	573.9326172	24	18621.31934
	27	475.3654	775.9467773	3.279469	15.1182	4.88766241	4.984924793	0.012311208	9.558670998	229.4081	7.588015556	7.742376328	0.03141088	24.3800201	585.1204834	24	18622.72266
	28	474.6213	774.7314453	3.275018	15.12605	4.5587225	4.655783176	0.011498321	8.913446426	213.9227	7.82156229	7.991622925	0.032422062	25.1224003	602.9376221	24	18593.55469
	29	475.3296	775.8884888	3.261324	15.15018	4.18118668	4.286640644	0.010586662	8.217634473	197.228	8.088391304	8.300159454	0.033673815	26.1282711	627.0784912	24	18621.32373
	30	488.2091	796.9113159	3.307896	15.06808	4.61102819	4.663611412	0.011517663	9.182181358	220.3723	8.514098167	8.613411903	0.034944676	27.8490582	668.3773804	24	19125.87158
	31	488.52	797.4179688	3.296895	15.08747	4.40800476	4.473165035	0.011047312	8.811782837	211.4828	8.56370163	8.693584442	0.035269924	28.1235924	674.9661865	24	19138.03125
Nov03	01	488.8575	797.9694824	3.293587	15.09331	4.86958177	4.944772243	0.012212029	9.750899778	234.0214	8.250502586	8.383127213	0.03401041	27.1382046	651.3168945	24	19151.26758
	02	487.5251	795.7946777	3.280042	15.11718	4.51420736	4.604889393	0.011372642	9.051843643	217.2442	8.359088898	8.528800011	0.03460139	27.5351162	660.8427734	24	19099.07227
	03	488.2115	796.9157715	3.288373	15.1025	4.4754138	4.553113937	0.011244761	8.965626717	215.175	8.384526253	8.533042908	0.03461862	27.5882416	662.1177979	24	19125.97852
	04	490.0992	799.996521	3.273237	15.12918	4.50085258	4.600162506	0.011360951	9.094302177	218.2632	8.39358902	8.581680298	0.034815941	27.8532333	668.4776001	24	19199.9165
	05	488.4782	797.350647	3.260709	15.15127	4.48145533	4.596382141	0.011351623	9.064284325	217.5428	8.320774078	8.539798737	0.034646027	27.6243916	662.9854126	24	19136.41553
	06	485.3108	792.1802368	3.284049	15.11012	4.48193264	4.566528797	0.0112779	8.938615799	214.5268	8.18261528	8.339083672	0.033831738	26.8008499	643.2203979	24	19012.32568
	07	484.9535	791.597168	3.300773	15.08064	4.66667318	4.729938507	0.011681454	9.254055977	222.0974	8.016795158	8.127837181	0.03297469	26.1043663	626.5048218	24	18998.33203
	08	483.2777	788.8617554	3.299057	15.08366	4.83821678	4.907088757	0.012118966	9.56256485	229.5016	7.776569843	7.88849926	0.032003701	25.2503796	606.0090942	24	18932.68213
	09	378.7856	706.6264648	2.977135	13.90956	6.94317293	11.8194418	0.029190276	13.60482121	285.7012	7.024934292	7.39814949	0.030014338	22.630022	475.2304688	20.88889	14760.64201
	10	487.5631	795.8574219	3.30726	15.06921	5.13265753	5.192420483	0.012823638	10.20909691	245.0183	7.79771471	7.890248775	0.03201079	25.4764881	611.43573	24	19100.57813
	11	487.7805	796.2116699	3.295813	15.08939	5.31151342	5.391711235	0.013315833	10.60637951	254.5531	7.778159618	7.897815704	0.032041486	25.5121002	612.2904053	24	19109.08008

	12	485.0904	791.8214111	3.283793	15.11057	4.87022495	4.96221447	0.012255113	9.70634079	232.9522	7.901636124	8.052736282	0.03267001	25.869091	620.8582153	24	19003.71387	
	13	488.6681	797.6601563	3.293842	15.09287	5.20435762	5.285891533	0.013054492	10.41850281	250.0441	7.936348438	8.06350708	0.032713711	26.0946465	626.2714844	24	19143.64375	
	14	488.7004	797.7138062	3.29257	15.0951	5.05189276	5.133296013	0.012677629	10.1177063	242.825	7.948431969	8.078907013	0.032776184	26.1461163	627.5067749	24	19145.13135	
	15	488.412	797.243103	3.295877	15.08926	4.70896339	4.780199051	0.011805596	9.414090157	225.9382	8.043345451	8.167043686	0.033139749	26.415554	633.9733276	24	19133.83447	
	16	490.0084	799.8485107	3.298993	15.08378	4.83662796	4.905428866	0.01211487	9.692457199	232.619	8.051930428	8.168026924	0.033137739	26.5050373	636.1209106	24	19196.36426	
	17	491.1015	801.6333008	3.291807	15.09645	5.25221348	5.338737011	0.013185	10.5714159	253.714	7.936191082	8.067892075	0.032731503	26.2403507	629.7684326	24	19239.19922	
	18	488.1182	796.7632446	3.290154	15.09935	4.95363951	5.037480831	0.012440992	9.915230751	237.9655	7.877206326	8.012138367	0.032505304	25.9007092	621.6170044	24	19122.31787	
	19	483.003	788.413269	3.279109	15.11883	4.51627302	4.607712269	0.011379616	8.975024223	215.4006	7.851610661	8.012905121	0.032508407	25.6339215	615.211731	24	18921.91846	
	20	482.5663	787.7003174	3.294731	15.09128	4.16046572	4.225861549	0.010436554	8.226417542	197.434	8.003599167	8.1301651	0.032984119	25.9848995	623.6375732	24	18904.80762	
	21	486.1485	793.5480347	3.304971	15.07323	3.99496412	4.043793201	0.009986907	7.928051949	190.2733	8.33428669	8.439352989	0.034238528	27.1714706	652.1152954	24	19045.15283	
	22	494.2968	806.8486938	3.293651	15.09319	3.99877906	4.061151028	0.010029765	8.102416992	194.458	8.637151718	8.775751114	0.035603303	28.7270451	689.4490967	24	19364.36865	
	23	494.5108	807.1984253	3.28691	15.10508	4.00434399	4.073103905	0.010059283	8.135130882	195.2431	8.638423538	8.693220139	0.035268456	28.4694328	683.2664185	24	19372.76221	
	24	490.0246	799.8754883	3.264653	15.14433	3.59909129	3.689144135	0.009111026	7.29288578	175.0293	8.656707764	8.873931885	0.0360016	28.7966423	691.1193848	24	19197.01172	
	25	490.8494	801.2207642	3.26904	15.13658	3.50370169	3.585147142	0.008854188	7.100920677	170.4221	8.790732384	8.999105453	0.036509428	29.2532578	702.078186	24	19229.29834	
	26	491.6099	802.4629517	3.280423	15.11652	3.88685369	3.964100361	0.009790082	7.860426903	188.6503	8.496769905	8.66752243	0.0351642	28.2213669	677.3128052	24	19259.11084	
	27	488.4455	797.296814	3.26446	15.14465	4.05315208	4.150228977	0.010249764	8.189368248	196.5448	8.186908722	8.393244743	0.034051459	27.1476707	651.5440674	24	19135.12354	
	28	485.7061	792.8259277	3.249263	15.17145	3.7375679	3.845398903	0.009496931	7.542327881	181.0159	8.16751194	8.41326046	0.034132659	27.0549793	649.319519	24	19027.82227	
	29	484.5327	790.9111938	3.258992	15.1543	3.42866039	3.520113468	0.008693578	6.883649826	165.2076	8.345734596	8.570467949	0.03477044	27.5001507	660.0036011	24	18981.86865	
	30	485.2093	792.0143433	3.26745	15.13938	3.65469388	3.74291873	0.009243838	7.321989536	175.7278	8.248753548	8.448376656	0.034275118	27.1476078	651.5426025	24	19008.34424	
Dec03	01	486.7906	794.5971069	3.280487	15.11641	4.02580643	4.105659008	0.010139692	8.059352875	193.4245	8.053520203	8.215995789	0.033332352	26.4877758	635.706604	24	19070.33057	
	02	482.9641	788.3504639	3.325921	15.03632	4.42285824	4.444793701	0.010977247	8.640929222	181.4595	7.863102913	7.914854527	0.03211062	25.3171616	531.6604004	24	18920.41113	
	03	486.6816	794.4180298	3.348242	14.99695	4.29142094	4.287465096	0.010588687	8.41271019	193.4923	8.189501762	8.185678482	0.033209365	26.37463	606.6165161	24	19066.03271	
	04	483.2751	788.8572998	3.391266	14.92109	3.95394492	3.901200056	0.009634743	7.603415489	182.482	8.179594994	8.073092461	0.0327526	25.8397121	620.1530762	24	18932.5752	
	05	480.1597	783.7719727	3.412127	14.88432	3.87874556	3.803392887	0.009393186	7.367235184	176.8136	8.170056343	8.014094353	0.032513242	25.4853992	611.6495972	24	18810.52734	
	06	476.6841	778.0993042	3.416895	14.8759	3.77047801	3.691620827	0.009117141	7.098483086	170.3636	8.019657135	7.854245663	0.031864718	24.7961826	595.1083984	24	18674.3833	
	07	477.2448	779.0139771	3.427962	14.85641	3.61165118	3.524566174	0.008704572	6.784228325	162.8215	8.027606964	7.837015152	0.031794824	24.7708874	594.5012817	24	18696.33545	
	08	486.6482	794.3641357	3.406655	14.89398	3.78557992	3.717679262	0.009181504	7.298380852	175.1611	8.408056259	8.259627342	0.033509374	26.6187782	638.850708	24	19064.73926	
	09	483.9806	790.0097656	3.411045	14.88622	3.35409665	3.290240049	0.008125858	6.426365376	154.2328	8.500108719	8.339690208	0.033834197	26.7331295	641.5950928	24	18960.23438	
	10	479.3544	782.4580688	3.40424	14.89822	3.11879826	3.065479994	0.007570776	5.926239491	142.2298	8.362744331	8.220980644	0.03335258	26.0967579	626.3222046	24	18778.99365	
	11	484.8465	791.4223633	3.412762	14.8832	3.39829469	3.331995487	0.008228981	6.517629623	156.4231	8.459726334	8.295553207	0.033655114	26.6349258	639.2382202	24	18994.13672	
	12	488.7061	797.7228394	3.40901	14.88982	3.87715626	3.805344582	0.009398002	7.504756451	180.1142	8.449234009	8.294288635	0.033649988	26.84375	644.25	24	19145.34814	
	13	482.9233	788.2832031	3.397245	14.91056	3.2658608	3.216497898	0.00794374	6.264094353	150.3383	8.396450996	8.271151543	0.033556111	26.4539708	634.8928833	24	18918.79688	
	14	481.0523	785.2294312	3.394447	14.91549	2.88684034	2.845414639	0.007027282	5.521252155	132.5101	8.431744576	8.312966347	0.033725761	26.4827747	635.5866089	24	18845.50635	
	15	485.6126	792.6735229	3.397945	14.90931	3.30290365	3.252280951	0.008032113	6.370487213	152.8917	8.358294487	8.231575966	0.033395559	26.4746075	635.390625	24	19024.16455	
	16	487.2415	795.3327026	3.376451	14.94722	3.49320841	3.460870743	0.008547267	6.802990437	163.2718	8.455433846	8.380741119	0.034000728	27.0417366	649.001709	24	19087.98486	
	17	484.0851	790.1801758	3.372062	14.95495	3.55028319	3.518333673	0.008689175	6.861348629	164.6724	8.531428337	8.467007637	0.034350708	27.1458912	651.5014038	24	18964.32422	
	18	481.5385	786.0230103	3.395909	14.91292	3.18143964	3.134886265	0.007742187	6.092936993	146.2305	8.476578712	8.353949547	0.033892035	26.6451492	639.4835815	24	18864.55225	
	19	477.0221	778.6508789	3.393239	14.91762	2.83087826	2.79030633	0.006891181	5.370181561	128.8844	8.497405052	8.381583214	0.034004141	26.4744549	635.3869019	24	18687.62109	
	20	475.3903	775.9871826	3.412445	14.88375	2.78747535	2.732969522	0.006749577	5.239285469	125.7429	8.205668449	8.047470093	0.032648638	25.3356419	608.0554199	24	18623.69238	
	21	477.2169	778.9691162	3.417277	14.87524	3.11275744	3.047727585	0.007526933	5.865128994	140.7631	8.064332008	7.897490025	0.032040175	24.9583912	599.0014038	24	18695.25879	
	22	478.0796	780.3773804	3.395782	14.91314	2.91863751	2.874983311	0.007100307	5.542732716	133.0256	8.194540024	8.07670784	0.032767255	25.5712242	613.7094116	24	18729.05713	
	23	477.3902	779.251709	3.375941	14.94812	2.59383345	2.570387125	0.006348048	4.948377132	118.761	8.413620949	8.340615273	0.033837926	26.368391	632.8413696	24	18702.04102	
	24	475.319	775.8704834	3.379057	14.94263	3.04042053	3.008756161	0.007430683	5.767407894	138.4178	8.156701088	8.079517365	0.032778662	25.4337921	610.4110107	24	18620.8916	
	25	480.2558	783.928833	3.389996	14.92334	3.11975384	3.079415321	0.007605188	5.965137959	143.1633	8.356067657	8.248627663	0.033464741	26.2408714	629.7808838	24	18814.29199	
	26	489.3271	798.7363892	3.395528	14.91357	3.64376664	3.591444254	0.008869737	7.08836937	170.1209	8.563384056	8.439653397	0.034239743	27.3482208	656.3572998	24	19169.67334	
	27	494.2964	806.8485107	3.369709	14.9591	4.53519297	4.503126144	0.011121301	8.980158806	215.5238	8.362904549	8.305086136	0.03369379	27.1866531	652.4796753	24	19364.36426	
	28	493.4972	805.5435791	3.340519	15.01056	4.58062104	4.586500168	0.011327215	9.136335373	219.272	8.33190155	8.347062111	0.033864088	27.2783661	654.6807861	24	19333.0459	
	29	482.1617	787.0411987	3.337277	15.01628	3.31927919	3.327744484	0.008218486	6.482642651	156.5834	8.547167778	8.571029663	0.03477272	27.3645077	656.74823	24	18888.98877	
	30	478.4593	780.9962158	3.348618	14.99628	2.76442242	2.760828257	0.006818378	5.330581188	127.934	8.546584129	8.542297363	0.034656163	27.0616665	649.4799805	24	18743.90918	
	31	484.7636	791.2878418	3.384399	14.93321	3.51419497	3.474121332	0.008579988	6.791621208	162.9989	8.462110519	8.36789608	0.033948626	26.8645954	644.7503052	24	18990.9082	
Jan04	01	482.0987	786.9360493	3.364812	14.96774	3.34519243	3.326473713	0.008215348	6.466556072	155.1974	8.370534897	8.325438499	0.033776365	26.5800133	637.9202881	24	18886.51318	
	02	480.5611	784.4267578	3.370472	14.95776	3.16840339	3.145130873	0.007767486	6.096082687	146.306	8.243347168	8.184911728	0.033206243	26.0485668	625.1655884	24	18826.24219	
	03	399.4506	711.3051147	2.973625	13.28878	4.84914398	5.144220829	0.012704618	9.479654312	208.5524	7.998771191	8.169553757	0.03314393	25.7617817	566.7592163	20.96389	14911.72088	
	04	501.03	817.8399048	3.387833	14.92715	5.97082472	5.894871235	0.014558479	11.9140501	285.9372	8.658139229	8.552778244	0.034698673	28.3776455	681.0634766	24	19628.15771	
	05	497.6345	812.2971191	3.37168	14.95562	5.53027725	5.486560345	0.013550071	11.01804256	264.433	8.684847832	8.619854927	0.034970809	28.4082413	681.7977905	24	19495.13086	
	06	491.3411	802.0234375	3.381856	14.93769	4.75868395	4.708983898	0.011629723	9.339430809	224.1463	8.757663727	8.666162491	0.035158671	28.1991043	676.7785034	24	19248.5625	
	07	486.9014	794.7766113	3.381421	14.93845	4.71689272	4.667942524	0.011528356	9.161972046	210.7254	8.406217575	8.318997383	0.033750236	26.8086395	616.5986938	24	19074.63867	
	08	485.0168	791.7004395	3.394193	14.91593	5.08432531	5.010434628	0.0123742	9.799455643	235.1869	8.168307304	8.055592537	0.032681592	25.879179	621.1002808	24	19000.81055	
	09	485.3518	792.2475586	3.404177	14.89833	4.91834545	4.831336021	0.011931881	9.465238571	227.1657	8.223316193	8.084651947	0.032799486	25.9826756	623.5842285	24	19013.94141	
	10	486.2196	793.6645508	3.408056	14.8915	4.44854641	4.367743492	0.010786945	8.564987183	205.5597	8.398199081	8.246973038	0.033458032	26.5556049	637.3344727	24	19047.94922	
	11	484.5822	790.9918823	3.430187	14.85248	4.66460657	4.54712534	0.011229968	8.831447601	211.9547	8.700587273	8.489222527	0.034440834	27.2702427	654.4857788	24	18983.80518	
	12	486.7115	794.4672241	3.435084	14.84385	4.96460867	4.835784912	0.011942863	9.430140495	226.3234	8.625389099	8.402615547	0.034089457	27.1002827	650.4067993	24	19067.21338	
	13	482.0468	786.8527832	3.421155	14.8684	6.96861124	6.805867672	0.016808355	13.0834341	314.0024	8.310281754	8.130518913	0.032985572	25.9922791	623.8146973	24	18884.4668	

	14	491.2171	801.8217163	3.405067	14.89677	4.69910526	4.617720604	0.011404321	9.146249771	219.51	8.663066964	8.514151573	0.034541965	27.6971664	664.7319946	24	19243.72119
	15	489.1674	798.4761963	3.418358	14.87333	4.04949522	3.965490103	0.009793509	7.823250771	187.758	8.776901245	8.592555046	0.03486006	27.8357792	668.0587158	24	19163.42871
	16	486.4557	794.0501709	3.422492	14.86604	4.02660179	3.937009573	0.009723181	7.721960545	185.3271	8.70392704	8.51077652	0.034528282	27.4170666	658.0095825	24	19057.2041
	17	488.1454	796.8081055	3.418676	14.87277	4.44775057	4.353237629	0.010751124	8.571050644	205.7052	8.589776993	8.408410072	0.034112971	27.1814709	652.3552856	24	19123.39453
	18	490.2883	800.3059692	3.414734	14.87973	4.96699429	4.866360188	0.012018374	9.623702049	230.9688	8.481825829	8.312330246	0.033723172	26.9895706	647.7496948	24	19207.34326
	19	489.2612	798.6287842	3.406657	14.89397	4.84044266	4.754698753	0.011742612	9.37849617	225.0839	8.514258385	8.36416626	0.033933491	27.1001129	650.40271	24	19167.09082
	20	488.1238	796.7722778	3.412317	14.88399	4.48177385	4.395318985	0.010855064	8.650201797	207.6048	8.615372658	8.449451447	0.034279484	27.3130455	655.5131226	24	19122.53467
	21	490.7635	801.0817261	3.395401	14.91381	5.28146601	5.204360008	0.012853137	10.30150318	247.2361	8.462587357	8.340571404	0.033837747	27.1072464	650.5739136	24	19225.96143
	22	492.7339	804.2971191	3.389168	14.9248	5.72185278	5.646467686	0.013944996	11.23047352	269.5314	8.347960472	8.242934227	0.033441637	26.8991089	645.5786133	24	19303.13086
	23	491.3435	802.0278931	3.411173	14.886	4.94648647	4.853488922	0.011966596	9.616247177	230.7899	8.56990242	8.407399178	0.034108873	27.3570213	656.5684814	24	19248.66943
	24	488.9037	798.0458984	3.418422	14.87323	4.40132761	4.307882309	0.010639117	8.499530792	203.9887	8.683099747	8.500541687	0.034486763	27.5228424	660.5482178	24	19153.10156
	25	488.6402	797.6152954	3.436291	14.84171	4.70943975	4.5860672	0.011326145	9.035573006	216.8537	8.533495903	8.310643196	0.033716328	26.8932285	645.4375	24	19142.76709
	26	488.5493	797.4672852	3.429169	14.85428	4.85268497	4.734208107	0.011692015	9.331097603	223.9463	8.505036354	8.29977417	0.033672236	26.8550339	644.520813	24	19139.21484
	27	487.1399	795.166687	3.415751	14.87794	4.84457588	4.745887756	0.01172085	9.323266983	223.7584	8.335558891	8.166594505	0.03313192	26.3460579	632.3054199	24	19084.00049
	28	486.7088	794.4628296	3.401887	14.90238	4.84489441	4.766478539	0.011771704	9.353474617	224.4834	8.253363609	8.119013786	0.03293889	26.1690998	628.0584106	24	19067.10791
	29	485.519	792.5209351	3.393112	14.91785	4.67780209	4.612055779	0.011390337	9.035344124	216.8483	8.302967072	8.189200401	0.033223651	26.3307991	631.939209	24	19020.50244
	30	484.2831	790.5029297	3.389995	14.92334	4.33169222	4.27486372	0.010557565	8.349712372	200.3931	8.368468285	8.261331558	0.033516284	26.4941998	635.8607788	24	18972.07031
	31	487.6157	795.942688	3.399089	14.90731	4.06539392	4.002360344	0.009884574	7.870178699	188.8843	8.686915398	8.552578926	0.034697868	27.6172409	662.8137817	24	19102.62451
Feb04	01	487.4893	795.7363281	3.400806	14.90428	4.07763577	4.010154247	0.009903821	7.889714718	189.3531	8.736994743	8.597628593	0.034880838	27.7552948	666.1270752	24	19097.67188
	02	480.3703	784.1172485	3.411491	14.88544	2.99781132	2.941219568	0.007263888	5.69962883	136.7911	8.732225418	8.567135811	0.034756929	27.2577343	654.1856079	24	18818.81396
	03	481.9259	786.6554565	3.423445	14.86435	3.02547503	2.95680213	0.007302375	5.746375561	137.913	8.772607803	8.575585365	0.034791213	27.3684216	656.8421021	24	18879.73096
	04	485.8542	793.0681763	3.39611	14.91256	3.89376616	3.836831331	0.009475764	7.518722534	172.9306	8.493258476	8.369566917	0.033955391	26.9253998	619.2841797	24	19033.63623
	05	487.2505	795.3461914	3.394256	14.91583	4.22978306	4.169625759	0.010297664	8.196790695	196.723	8.293906212	8.177163124	0.033174809	26.3873539	633.2965088	24	19088.30859
	06	484.9918	791.6599731	3.384463	14.93309	3.95362663	3.908459187	0.009652665	7.644009113	183.4562	8.326337814	8.232965469	0.033401206	26.4432964	634.6390991	24	18999.83936
	07	487.4562	795.6824951	3.369582	14.95933	4.52295113	4.489855289	0.011088544	8.831773758	211.9626	8.250025749	8.193984032	0.033243045	26.448679	634.7683105	24	19096.37988
	08	487.6257	795.9606323	3.372952	14.95338	4.57493877	4.538058281	0.011207575	8.928908348	214.2938	8.379598618	8.313838005	0.0337293	26.8475246	644.3405762	24	19103.05518
	09	488.5027	797.3910522	3.377595	14.9452	4.59878683	4.555803776	0.011251401	8.979637146	215.5113	8.457181931	8.379493713	0.033995658	27.1099586	650.6389771	24	19137.38525
	10	486.6622	794.3864136	3.362664	14.97152	4.29164219	4.269911766	0.010545343	8.383243561	192.8146	8.396651268	8.356168747	0.033901025	26.9363136	619.5352173	24	19065.27393
	11	485.1076	791.8484497	3.37168	14.95563	4.17859077	4.146639347	0.010240902	8.11242485	194.6982	8.447324753	8.385486603	0.034019977	26.9397545	646.5540771	24	19004.36279
	12	485.0413	791.7407837	3.385417	14.93141	4.26730394	4.21655035	0.010413565	8.250980377	198.0235	8.395814896	8.299860954	0.033672597	26.6598415	639.8361816	24	19001.77881
	13	485.3625	792.2654419	3.376832	14.94655	4.15840101	4.11858511	0.010171607	8.069329262	193.6639	8.442873955	8.368085861	0.033949375	26.8938503	645.4523926	24	19014.37061
	14	480.8599	784.9155273	3.38866	14.9257	3.17810082	3.137317419	0.00774819	6.085021019	146.0405	8.560838699	8.455143929	0.034302577	26.9211617	646.1079102	24	18837.97266
	15	479.8352	783.2427979	3.391395	14.92085	3.32881951	3.283656359	0.0081096	6.353947639	152.4947	8.399152756	8.288550377	0.033626705	26.3379421	632.1105957	24	18797.82715
	16	478.2085	780.5880127	3.413461	14.88198	3.49924994	3.429728746	0.008470353	6.614228725	158.7415	8.151614189	7.992258072	0.032424651	25.3125	607.5	24	18734.1123
	17	477.4318	779.3190308	3.407293	14.89285	3.50735784	3.444252491	0.008506222	6.631436825	159.1545	8.137940407	7.992995262	0.032427639	25.2741413	606.5794067	24	18703.65674
	18	477.1597	778.875	3.390838	14.93947	3.14137578	3.109153748	0.007678635	5.982334614	143.576	8.234603882	8.151218414	0.033069547	25.7599163	618.2379761	24	18693
	19	478.1925	780.5610962	3.389422	14.92434	3.11975336	3.079376698	0.007605096	5.938655853	142.5277	8.353842735	8.248279572	0.033463329	26.1198673	626.87677	24	18733.46631
	20	476.7473	778.2022705	3.396545	14.9118	2.83008289	2.787783861	0.00688495	5.359370232	128.6249	8.564338684	8.438352585	0.034234453	26.6416798	639.4003296	24	18676.85449
	21	475.0688	775.4624023	3.400107	14.90551	2.63707638	2.594864607	0.006408502	4.971944332	119.3267	8.618233681	8.482387543	0.034413103	26.6857548	640.4580688	24	18611.09766
	22	251.2719	546.7781982	2.423517	11.20875	3.54662943	5.915966034	0.014610589	5.428865433	97.71958	6.937661171	7.703565598	0.031253424	20.9826584	377.6878357	16.25	8885.145721
	23	480.483	784.3013306	3.443605	14.82882	2.9025805	2.819932461	0.006964351	5.463732243	131.1296	8.604084015	8.36171627	0.033923533	26.6062965	638.5510864	24	18823.23193
	24	483.1288	788.6195679	3.446277	14.82411	3.40831041	3.309135437	0.008172527	6.446667671	154.72	8.356068611	8.114469528	0.032920465	25.9626827	623.1043701	24	18926.86963
	25	479.2086	782.220459	3.370693	14.95738	2.98199701	2.958425999	0.007306386	5.718905926	131.5348	8.439175606	8.379104614	0.033994082	26.5907784	611.5878906	24	18773.29102
	26	482.3602	787.3640137	3.396609	14.91168	2.90385246	2.859699488	0.007062562	5.56271553	133.5052	8.570378304	8.445703506	0.034264289	26.9795461	647.4851074	24	18896.73633
	27	486.9531	794.8620605	3.401442	14.90316	3.22293448	3.169857502	0.007828554	6.226785183	149.4429	8.547327042	8.409420013	0.034117077	27.1181412	650.8353882	24	19076.68945
	28	488.5493	797.4671021	3.392603	14.91873	3.60640574	3.556358337	0.008783089	7.008010864	168.1923	8.437944412	8.323361397	0.033767935	26.928524	646.2846069	24	19139.21045
	29	485.5964	792.6466064	3.388406	14.92613	3.60179329	3.557605505	0.008786171	6.96819067	167.2366	8.338420868	8.235526085	0.033411592	26.4856758	635.656189	24	19023.51855
Mar04	01	480.3986	784.1621094	3.383255	14.93522	2.98254919	2.950147629	0.007285935	5.71518898	137.1645	8.435400963	8.34392643	0.033851363	26.5451336	637.0831909	24	18819.89063
	02	479.8021	783.1890259	3.398325	14.90865	2.60480213	2.564129591	0.006308074	4.943456669	118.6425	8.720301628	8.587978363	0.034731571	27.2013454	652.8322754	24	18796.53662
	03	481.678	786.2518921	3.375497	14.94889	3.48668957	3.455345392	0.008409859	6.621201515	158.9088	8.294383049	8.222560883	0.032863554	25.8426418	620.2233887	24	18870.04541
	04	484.3652	790.6376953	3.378803	14.94308	3.85442114	3.816814184	0.009289626	7.347111702	176.3307	8.272760391	8.193675041	0.032748107	25.8920746	621.40979	24	18975.30469
	05	484.1735	790.3237915	3.393112	14.91785	4.44330025	4.380259037	0.010660972	8.428957939	202.295	7.954314709	7.846097469	0.03135892	24.7853127	594.8474731	24	18967.771
	06	480.3795	784.1307373	3.389424	14.92435	4.18097544	4.127434731	0.010045639	7.884602547	189.2305	7.695329189	7.598326206	0.030368634	23.8159122	571.5819092	24	18819.1377
	07	473.7475	773.3053589	3.393747	14.91674	3.71610332	3.664276361	0.008918369	6.907503128	165.7801	7.566233158	7.461384773	0.029821316	23.0676289	553.6231079	24	18559.32861
	08	469.5521	766.4578247	3.390885	14.92177	3.83502388	3.784256697	0.00921039	7.059186935	169.4205	7.40995121	7.313051701	0.029228479	22.4080791	537.7938843	24	18994.98779
	09	469.8707	766.9779663	3.385098	14.93199	4.15219927	4.10340786	0.009987151	7.666392803	183.9934	7.349378109	7.265963078	0.029040262	22.2766991	534.6408081	24	18407.47119
	10	466.9645	762.2333374	3.405895	14.89531	3.90577364	3.836599112	0.009337776	7.123034	170.9528	7.393098354	7.265358925	0.029037854	22.1380672	531.3135986	24	18293.6001
	11	468.3539	764.5025635	3.380774	14.93959	3.82325959	3.783149481	0.009207696	7.04312849	169.0351	7.491033554	7.414587498	0.029634278	22.6619625	543.887085	24	18348.06152
	12	469.8981	767.0228271	3.405258	14.89643	3.72882342	3.66465497	0.008919292	6.844927311	164.2782	7.652719498	7.521190643	0.030060351	23.0603542	553.4484863	24	18408.54785
	13	470.3018	767.6820068	3.412698	14.88332	3.77397418	3.699625492	0.00900441	6.915041447	165.961	7.573069572	7.426277161	0.029681005	22.7904167	546.9699707	24	18424.36816
	14	470.1733	767.4713135	3.404431	14.8979	4.05776215	3.987334251	0.009704654	7.451729774	178.8415	7.407248974	7.280828476	0.029099698	22.3371964	536.0927124	24	18419.31152
	15	467.3405	762.8477783	3.410981	14.88634	4.03439188	3.956971645	0.009630746	7.351224899	176.4294	7.255418777	7.118339062	0.028450251	21.7060165	520.944397	24	18308.34668
	16	466.2639	761.0899658	3.40176	14.9026	4.07795334	4.008945942	0.00975725	7.43412447	178.419	7.225687981	7.107897282	0.028408526	21.6251793	519.0043335	24	18266.15918

	17	465.4528	759.7669678	3.385544	14.93119	3.84186125	3.795245409	0.009237129	7.02255106	168.5412	7.309154987	7.224716187	0.028875422	21.9408379	526.5800781	24	18234.40723	
	18	465.1927	759.3410034	3.382873	14.9359	3.54312921	3.502702951	0.008525121	6.479273796	155.5026	7.471318722	7.390649319	0.029538592	22.4333782	538.401123	24	18224.16408	
	19	466.8654	762.0720215	3.399344	14.90685	3.63009405	3.571295023	0.008692066	6.627098083	159.0504	7.494371891	7.37834692	0.029489446	22.4759293	539.4223022	24	18289.72852	
	20	467.2094	762.6325684	3.389169	14.92479	3.94313407	3.890655756	0.009469347	7.227601528	173.4624	7.303908825	7.211168766	0.028821267	21.9850254	527.640625	24	18303.18164	
	21	466.5245	761.5159912	3.382047	14.93736	3.89639163	3.852078438	0.009375455	7.145724773	171.4974	7.343177795	7.266301632	0.02904162	22.1171875	530.8125	24	18276.38379	
	22	465.4094	759.6953125	3.380393	14.94027	3.60243082	3.564758778	0.008676156	6.594604015	158.2705	7.471159935	7.396278858	0.029561117	22.4617577	539.0822144	24	18232.6875	
	23	471.7501	770.0452271	3.412826	14.88308	3.92008162	3.842374086	0.009351836	7.207056999	172.9694	7.614563465	7.467140198	0.029844329	22.9842701	551.6224976	24	18481.08545	
	24	479.2883	782.3504028	3.39343	14.91729	4.05156136	3.994854689	0.009722956	7.610383511	182.6492	7.901530743	7.792346478	0.031144096	24.3671551	584.8117065	24	18776.40967	
	25	478.0222	780.2831421	3.395782	14.91315	4.19750977	4.135415077	0.010065057	7.860364437	188.6488	7.634280968	7.72084856	0.030858325	24.0814209	577.9541016	24	18726.79541	
	26	482.8792	788.2115479	3.40405	14.89856	4.31865597	4.244552612	0.010330693	8.146501541	195.516	7.960674763	7.826241493	0.031279564	24.6561966	591.7487183	24	18917.07715	
	27	482.3465	787.3415527	3.393492	14.91717	4.48892879	4.425692081	0.010771573	8.484372139	203.6249	7.881022453	7.771841526	0.031062141	24.4585285	587.0046997	24	18896.19727	
	28	474.6319	774.7493896	3.380393	14.94026	4.13963938	4.096386433	0.009970071	7.731012821	185.5443	7.654628754	7.577921867	0.030287096	23.4719543	563.3269043	24	18593.98535	
	29	469.9616	767.1259766	3.354192	14.98646	3.65966415	3.645009518	0.00887148	6.818966866	163.6552	7.699939251	7.682569027	0.030705342	23.5566044	565.3585205	24	18411.02344	
	30	472.6186	771.4623413	3.3975	14.91011	3.67301965	3.616891623	0.008803044	6.796778202	163.1227	7.796761036	7.680183887	0.0306958	23.6851921	568.4445801	24	18515.09619	
	31	476.1208	777.1799927	3.395719	14.91325	3.94456506	3.886658192	0.009459617	7.354376793	176.505	7.88420105	7.769775867	0.031053884	24.1360035	579.2640991	24	18652.31982	
Apr04	01	477.198	778.9376831	3.368564	14.96113	3.54773879	3.52204299	0.008572191	6.680569172	160.3337	8.242713928	8.190312386	0.032734662	25.4983788	611.9611206	24	18694.50439	
	02	477.1758	778.9019165	3.386878	14.92883	3.20798993	3.168179274	0.007710936	6.009085178	144.218	8.442396164	8.344419479	0.033350598	25.9750843	623.4019775	24	18693.646	
	03	473.3107	772.5924683	3.40901	14.88981	3.4808054	3.415917397	0.008313896	6.427574158	154.2618	7.955585957	7.809639931	0.0312132	24.1174965	578.8198853	24	18542.21924	
	04	452.5637	770.8447876	3.390668	14.92215	3.33170652	3.286179543	0.007998128	6.170413971	141.9195	7.893374443	7.790288925	0.031135874	24.0029964	552.0689087	24	18500.2749	
	05	474.8626	775.1260986	3.400679	14.90451	3.61944294	3.560501337	0.0086658	6.721105099	161.3065	7.933327675	7.807003498	0.031202676	24.1883907	580.5214233	24	18603.02637	
	06	477.1647	778.8839722	3.393492	14.91717	3.7575984	3.705011368	0.009017515	7.02758646	168.6621	7.96194458	7.85183239	0.031381864	24.4462585	586.7102051	24	18693.21533	
	07	476.0939	777.1350098	3.373589	14.95227	3.786057	3.754181147	0.009137189	7.106198311	170.5488	7.958924294	7.894994259	0.031554349	24.5239334	588.5744019	24	18651.24023	
	08	471.258	769.2425537	3.388915	14.92523	3.68112874	3.634667873	0.008846308	6.812661648	163.5039	7.730783463	7.634543419	0.030513387	23.4779243	563.4702148	24	18461.82129	
	09	462.6979	755.269043	3.396609	14.91168	2.91975164	2.873977184	0.006994885	5.28846693	126.9232	7.640319347	7.527069092	0.030083843	22.7239132	545.3739014	24	18126.45703	
	10	461.514	753.3363647	3.384908	14.9323	2.71402502	2.680762768	0.006524626	4.918912411	118.0539	7.7174263	7.631065845	0.030499505	22.9769287	551.4462891	24	18080.07275	
	11	464.5605	758.3096924	3.374415	14.9508	2.63405538	2.610706568	0.006354115	4.821128368	115.7071	7.963217735	7.897240639	0.031563342	23.9358749	574.4609985	24	18199.43262	
	12	467.0114	762.3096313	3.376513	14.9471	2.98223114	2.955938339	0.00719437	5.486847878	131.6844	7.921880722	7.850579262	0.031376842	23.9222755	574.1345825	24	18295.43115	
	13	473.1678	772.3591309	3.41645	14.8767	3.50242949	3.429593325	0.008347184	6.449988842	154.7997	7.961627483	7.798791885	0.031169854	24.075655	577.8156738	24	18536.61914	
	14	476.6375	778.0228882	3.393557	14.91705	3.63104701	3.579439878	0.008711888	6.781929016	162.7663	8.058449745	7.946516037	0.031760275	24.7119007	593.0855713	24	18672.54932	
	15	473.9177	773.5834351	3.400743	14.90439	3.42627573	3.370277405	0.008202815	6.351100922	152.4264	8.028082848	7.90034771	0.031575751	24.4284172	586.2819824	24	18566.00244	
	16	475.7967	776.6506958	3.406911	14.89352	3.253618	3.194989681	0.007776188	6.041528702	144.9967	8.244621277	8.098841667	0.032369081	25.1395454	603.3491211	24	18639.6167	
	17	475.6838	776.4667969	3.412445	14.88375	3.12484217	3.062969208	0.007454869	5.790421486	138.9701	8.341282845	8.181241035	0.032698408	25.3892078	609.3410034	24	18635.20313	
	18	478.4373	780.9602661	3.412889	14.88297	3.63899589	3.568181276	0.008684467	6.78288269	162.7892	8.075460434	7.918607712	0.031648729	24.7164879	593.1956787	24	18743.04639	
	19	475.695	776.4848633	3.407356	14.89273	3.47921705	3.41659379	0.008315543	6.460156441	155.0438	7.92569685	7.78469944	0.031113537	24.1604004	579.8496094	24	18635.63672	
	20	470.547	768.0811768	3.391395	14.92087	3.34916925	3.304579973	0.008042915	6.178995132	148.2959	7.902803421	7.798109055	0.031167122	23.9400959	574.5623169	24	18433.94824	
	21	473.6538	773.1528931	3.380478	14.94013	3.63905048	3.602267027	0.008767446	6.783213139	162.7971	7.89511919	7.815562725	0.03123688	24.1527882	579.6669312	24	18555.66943	
	22	476.6706	778.0767822	3.397501	14.91011	3.64313126	3.586628675	0.008729386	6.794783592	163.0748	8.053997993	7.934644222	0.031712811	24.6763878	592.2332764	24	18673.84277	
	23	475.5909	776.3143311	3.373333	14.95271	4.19067935	4.155880451	0.010114876	7.855164051	188.5239	7.781655788	7.720146179	0.030855516	23.9549923	574.9197998	24	18631.54395	
	24	292.4201	673.8164673	2.928966	13.58467	5.71513748	8.040664673	0.019569909	10.43806076	177.447	6.939507008	7.321393967	0.029261824	21.3423481	362.8199158	16.63889	11211.55762	
	25	473.4317	772.7896729	3.364939	14.96752	4.21722364	4.191030025	0.010200419	7.890904903	189.3817	7.7117033	7.668316364	0.030648379	23.6891041	568.5385132	24	18546.95215	
	26	471.846	770.2023315	3.358071	14.97962	4.74839067	4.730433941	0.011513262	8.871247292	212.9099	7.456056595	7.429785728	0.029695028	22.8771133	549.0507202	24	18484.85596	
	27	470.2032	767.5206299	3.357563	14.98051	4.78336811	4.765408516	0.011598379	8.906515121	213.7564	7.489125252	7.465025425	0.02983588	22.901804	549.6433105	24	18420.49512	
	28	473.5851	773.0408936	3.324367	15.03904	4.23105669	4.254811764	0.01035565	8.011004448	192.2641	8.03857708	8.09295845	0.032345563	25.0047379	600.1137085	24	18552.98145	
	29	478.9015	781.7181396	3.374542	14.95058	3.92930341	3.894336224	0.009478302	7.422611713	178.1427	8.376736641	8.308582306	0.033207357	25.9580574	622.9934082	24	18761.23535	
	30	464.8626	758.8029785	3.328945	15.03097	2.61243343	2.623643637	0.006385604	4.848803997	116.3713	8.255271912	8.297698021	0.033163864	25.1666336	603.9992065	24	18211.27148	
Total		335,408	555376.0066							130,947					448,907	16860.85	13,246,536	
Average		471.7416	781.1195593	3.221922	15.07006	4.00029846	4.476264001	0.011042014	7.865565712	184.1736	8.096477253	8.365987959	0.033896995	26.6681022	631.3747132	23.06546	18121.11577	
Ann Avg.		167,704								65,474					224,454	8430.426	6,623,268	

6493.399819 mmscf/yr

Unit 4 CEMS DATA

Month/Year	Day	Daily Fuel Gas in tons/day	fuel gas heat rate (mmbtu/hr) -- lower heating value	Average CO2 conc. (%)	Average O2 conc. (%)	Average CO conc. uncorrected (ppm)	Average CO conc. corrected (ppm)	Average CO emission factor (lb/mmbtu)	Average CO mass emission rate (lb/hr)	CO mass emissions rate (lb/day)	Average NOx conc. uncorrected (ppm)	Average NOx conc. corrected (ppm)	Average NOx emission factor (lb/mmbtu)	Average NOx mass emission rate (lb/hr)	Daily NOx mass emissions rate (lb/day)	Daily turbine run time (hr/day)	Fuel Gas (MMBtu/day)
May02	01	476.1533	813.6337891	3.225234	15.19169	9.04005337	9.345271111	0.023062056	18.76288223	431.5463	5.890170097	6.088109016	0.024680426	20.0759735	481.747406	24	19527.21094
	02	469.8623	802.883728	3.211741	15.2156	8.60233593	8.925287247	0.022025634	17.68825912	424.5182	5.969074249	6.195567608	0.025116028	20.1647625	483.9542847	24	19269.20947
	03	466.7879	797.6306763	3.236289	15.17217	8.74542332	9.005770683	0.022224259	17.7336216	425.6069	5.998804569	6.179169655	0.02504955	19.9801674	479.5239868	24	19143.13623
	04	465.2201	794.9501343	3.21033	15.21809	8.19475651	8.506149292	0.020991292	16.68521309	367.0747	5.794380188	6.015572071	0.024386369	19.3797264	426.3540039	24	19078.80322
	05	462.8572	790.913147	3.213395	15.21268	8.1784811	8.484163284	0.020937029	16.57255936	397.7414	5.503408909	5.707664013	0.023138138	18.289505	438.9480896	24	18981.91553
	06	463.7966	792.5185547	3.219944	15.20108	7.75701427	8.02715683	0.019809237	15.7058754	376.941	5.738546848	5.940617561	0.024082512	19.087038	458.0888977	24	19020.44531
	07	467.7035	799.1939087	3.228975	15.18511	7.90200853	8.157078743	0.020129854	16.09372902	386.2495	5.941093922	6.133389473	0.024863983	19.8700333	476.8807983	24	19180.65381
	08	470.9919	804.8131104	3.214583	15.21057	9.34208679	9.687532425	0.023906667	19.24518394	461.8844	5.653648853	5.860923767	0.023759434	19.1242962	458.9830933	24	19315.51465
	09	469.5831	802.4047241	3.20621	15.22538	9.1746788	9.537149429	0.023535563	18.88926315	453.3423	5.576543331	5.797442436	0.0235021	18.8574162	452.5780029	24	19257.71338
	10	473.6433	809.3432007	3.211293	15.2165	9.49376297	9.854999542	0.024319934	19.69047165	472.5713	5.732506752	5.95081234	0.024123838	19.5250912	468.6022034	24	19424.23682
	11	471.6156	805.8787231	3.236098	15.17251	9.54844952	9.834456444	0.024269242	19.5635376	469.5249	5.813904762	5.989285946	0.024279788	19.5697575	469.6741943	24	19341.08936
	12	466.2747	796.7528076	3.228467	15.18601	9.65434074	9.965907097	0.024593633	19.61089134	470.6614	5.5681007	5.739468098	0.023267072	18.5334167	444.802002	24	19122.06738
	13	465.8652	796.0534058	3.220899	15.1994	10.2039413	10.55751514	0.02605363	20.75098801	498.0237	5.727259636	5.927726176	0.024030266	19.1264133	459.033905	24	19105.28174
	14	466.2938	796.7857056	3.228912	15.18522	9.29581833	9.595700264	0.023680042	18.88092995	453.1423	5.911839962	6.103538036	0.02474295	19.7169075	473.2058105	24	19122.85693
	15	462.3048	789.9693604	3.230057	15.1832	8.94049454	9.225169182	0.022765668	17.99027061	431.7665	5.815019608	6.001277447	0.024328392	19.2205925	461.2941895	24	18959.26465
	16	463.7719	792.4762573	3.235534	15.17351	8.92759895	9.196327209	0.022694495	17.99398804	305.8978	5.857887268	6.035657406	0.024467783	19.3883877	329.6026001	24	19019.43018
	17	458.6243	783.678894	3.216256	15.20761	7.41885328	7.686672688	0.018968996	14.87206268	356.9295	5.946022034	6.161957284	0.0249798	19.5796547	469.9117126	24	18808.29346
	18	459.3076	784.8478394	3.225986	15.19038	7.52155733	7.769464493	0.01917332	15.05596638	361.3432	6.08592701	6.28859663	0.025493158	20.0076714	480.184082	24	18836.34814
	19	131.0219	596.9902344	2.443528	12.51133	6.96776772	15.84272861	0.0390963	13.06828022	117.6145	6.060910225	8.714252472	0.035326444	19.7681503	177.9133453	8.758333	5228.639393
	20	475.3764	812.3052368	3.261153	15.12813	9.28453064	9.49189949	0.023423895	19.04210854	457.0106	6.34284687	6.483407021	0.026282905	21.3455372	512.2929077	24	19495.32568
	21	480.2227	820.5863037	3.260009	15.13015	10.8699417	11.11406612	0.027427055	22.50935364	540.2245	6.02281189	6.15825367	0.024964774	20.4870377	491.6889038	24	19694.07129
	22	477.2309	815.473938	3.197872	15.24013	10.2170897	10.64830875	0.026277691	21.41984367	492.6564	5.701822281	5.939462662	0.024077818	19.6276646	451.4363098	24	19571.37451
	23	474.3266	810.5120239	3.192121	15.2503	9.77746105	10.21207523	0.025201134	20.42442703	469.7618	5.209550381	5.43888998	0.022048574	17.8624573	410.8364868	24	19452.28857
	24	470.5245	804.0148926	3.241976	15.16211	9.28587723	9.547195435	0.023560351	18.83747101	263.7246	5.360413551	5.513916492	0.022352749	17.8192139	249.4689941	24	19296.35742
	25	464.7389	794.1286011	3.241503	15.16294	9.73906517	10.01450825	0.024713559	19.63279915	471.1872	5.976229668	6.146119595	0.024915591	19.7917995	475.0032043	24	19059.08643
	26	465.4454	795.335144	3.249454	15.14887	9.3694334	9.609101295	0.023713125	18.86845398	452.8429	5.727261066	5.87539959	0.023818124	18.9448338	454.6759949	24	19088.04346
	27	465.3688	795.2037354	3.253777	15.14119	9.23064423	9.452640533	0.023327025	18.56335831	445.5206	5.836800098	5.979748249	0.024241129	19.2771492	462.6516113	24	19084.88965
	28	464.542	793.7905273	3.247353	15.15258	10.3859768	10.65972042	0.026305838	20.88513756	501.2433	5.73711729	5.889598846	0.023875674	18.9549046	454.9176941	24	19050.97266
	29	459.1129	784.5145264	3.216607	15.20698	10.9768982	11.37532139	0.028071756	22.01717377	506.395	5.462821007	5.661075592	0.022949288	17.9995651	413.9899902	24	18828.34863
	30	454.2726	776.2428589	3.235589	15.17339	10.8448086	11.17237949	0.02757098	21.40787125	513.7889	5.391167164	5.555291176	0.022520449	17.4828548	419.588501	24	18629.82861
	31	455.0826	777.6278076	3.246273	15.1545	8.6896162	8.920324326	0.022013362	17.11974144	410.8738	5.529484272	5.678586006	0.023020262	17.9020252	429.6485901	24	18663.06738
Jun02	01	463.2751	791.6265869	3.242584	15.16102	8.60980701	8.85052681	0.021841126	17.294384	415.0652	5.604046822	5.760630606	0.023352861	18.4875793	443.7019043	24	18999.03809
	02	470.676	804.2733154	3.243346	15.15965	9.35147095	9.609458923	0.023714008	19.08037567	457.929	5.715335846	5.873668194	0.023811113	19.1519051	459.6456909	24	19302.55957
	03	465.8047	795.9500732	3.252506	15.14346	9.7187233	9.960475922	0.024580238	19.56856201	470.1255	5.777657032	5.921719551	0.024005905	19.1061592	458.5477905	24	19102.80176
	04	461.1213	787.9460449	3.252765	15.14298	8.1111021	8.346940041	0.0205984	16.1623497	355.5717	6.133625507	6.272744656	0.025428904	20.0778313	441.7123108	24	18910.70508
	05	456.2823	779.6793213	3.267959	15.1161	8.8131485	9.023024559	0.022266816	17.31376648	415.5304	5.82090044	5.926336288	0.024024608	18.7636547	450.3276978	24	18712.30371
	06	456.4233	779.9185791	3.294477	15.06916	7.33172941	7.475897312	0.018448858	14.29835415	343.1605	6.353816986	6.406760216	0.025972195	20.3166542	487.5997009	24	18718.0459
	07	459.1982	784.6599731	3.271435	15.10996	6.7884264	6.956274509	0.017166544	13.40855408	321.8053	6.469398975	6.572754383	0.026645109	20.9570999	502.9703979	24	18831.83936
	08	461.3983	788.4202881	3.246845	15.15348	7.84318304	8.051918983	0.019870354	15.66959953	376.0704	5.850790501	6.007385254	0.024353184	19.2000866	460.8020935	24	18922.08691
	09	470.1425	803.3626709	3.263571	15.12986	8.1123457	8.284095764	0.020443304	16.42949104	394.3078	5.824081421	5.949064255	0.024116762	19.3764248	465.0342102	24	19280.7041
	10	464.0684	792.9831543	3.259437	15.13118	7.88897276	8.065826416	0.019904675	15.79332066	379.0397	5.839184284	5.972133636	0.024210274	19.1977882	460.7469177	24	19031.5957
	11	461.1814	788.0494385	3.260328	15.12961	8.56274509	8.752800941	0.021599967	17.04487038	409.0769	5.797689438	5.928233624	0.0240323	18.9374008	454.4975891	24	18913.18652
	12	459.5549	785.2702026	3.263571	15.12386	8.8004303	8.988677979	0.022182055	17.42172432	418.1214	5.586081982	5.705007076	0.023127362	18.1660671	435.9855957	24	18846.48486
	13	458.9012	784.1530151	3.272214	15.10855	9.06003475	9.228977203	0.022775069	17.86617661	393.0559	6.564965725	6.693845272	0.027135991	21.3554268	469.819397	24	18819.67236
	14	463.0219	791.1945801	3.240052	15.16549	7.80019426	8.067463875	0.019908715	15.62928391	265.6978	5.978494167	6.134361744	0.02486793	19.6473064	334.0042114	24	18988.66992
	15	457.5768	781.8901978	3.240867	15.16406	8.51537037	8.758826256	0.021614842	16.90851593	405.8044	5.388463497	5.543169022	0.022471309	17.5716419	421.7193909	24	18765.36475
	16	460.6601	787.1574097	3.242584	15.16101	8.78326225	9.026804924	0.02227615	17.54013824	420.9633	5.382738113	5.534435749	0.022435892	17.6599159	423.8380127	24	18891.77783
	17	459.2806	784.8009033	3.246972	15.15326	8.69057274	8.918400764	0.022008633	17.28524209	414.8458	5.345537186	5.488102436	0.02224808	17.4626083	419.1026001	24	18835.22168
	18	455.3575	778.09729	3.254691	15.13961	8.11122513	8.309311867	0.020505542	15.94913197	303.0335	5.33866787	5.466825008	0.022161806	17.239006	327.5411072	24	18674.33496
	19	457.088	781.0546265	3.307767	15.04562	6.6155057	6.720143318	0.01658381	12.86725807	308.8142	5.93107748	5.956706047	0.024147721	18.9183826	454.0411987	24	18745.31104
	20	455.1894	777.810791	3.27578	15.10224	8.10534954	8.244924545	0.020346651	15.83158779	379.9581	5.211037636	5.303453922	0.021499526	16.7232914	401.3590088	24	18667.45898
	21	463.6019	792.1852417	3.261161	15.12811	8.77630806	8.969619751	0.022135044	17.51501846	367.8154	5.404566765	5.524656773	0.022396252	17.7164898	372.0462952	24	19012.4458
	22	362.4256	707.6904907	2.942393	13.95267	10.5469475	14.43874359	0.035631653	19.46300888	408.7232	5.181625366	5.648843765	0.022899682	16.7085533	350.8796082	20.88611	14780.90165
	23	459.1596	784.5942383	3.272981	15.10718	10.306489	10.49646664	0.025902946	20.32968712	487.9125	5.684650898	5.789917946	0.023471588	18.4156075	441.9746094	24	18830.26172
	24	458.4069	783.3080444	3.265339	15.12073	10.4521532	10.66888428	0.026328426	20.63949585	412.7899	5.676131248	5.794776917	0.023491289	18.41255	368.2510071	24	18799.39307
	25	462.8739	790.9412231	3.285002	15.08593	8.15905996	8.322607994	0.020538339	16.12222481	370.8112	6.445923328	6.522624016	0.026441883	20.9742088	482.4067993	24	18982.58936

	26	463.608	792.194519	3.290279	15.07658	7.92092466	8.091069221	0.01996698	15.72720051	377.4528	6.423611164	6.484200001	0.026286116	20.8793869	501.1052856	24	19012.66846	
	27	460.9564	787.6644287	3.276237	15.10143	8.97816753	9.170534194	0.022630828	17.78718758	391.3181	5.768363476	5.85743618	0.023745313	18.7275867	412.006897	24	18903.94629	
	28	457.8212	782.3081055	3.219203	15.20236	9.87150669	10.22175694	0.025225004	19.73756599	473.7016	5.410986423	5.604114056	0.022718359	17.7725334	426.540802	24	18775.39453	
	29	456.626	780.2659302	3.209962	15.21875	9.78152084	10.15762043	0.025066743	19.56175041	469.482	5.379878521	5.587209702	0.022649828	17.6733875	424.1612854	24	18726.38232	
	30	454.5137	776.6560059	3.235589	15.17339	10.8662691	11.1925993	0.027620854	21.45493698	514.9185	5.535364628	5.701883793	0.023114713	17.9515591	430.8374023	24	18639.74414	
Jul02	01	449.0138	767.2577515	3.212885	15.21355	6.41454887	6.706662178	0.016550556	12.66231537	303.8956	5.970347404	6.173750401	0.025027592	19.2637157	462.3291931	24	18414.18604	
	02	456.7415	780.4631958	3.221217	15.19883	8.89725208	9.206254005	0.022718983	17.74008751	425.7621	5.358733177	5.545623302	0.02248125	17.545845	421.1003113	24	18731.1167	
	03	463.7945	792.5137939	3.255282	15.13854	7.24137449	7.45993042	0.018409453	14.52441788	348.586	6.254239559	6.3864007	0.025889654	20.5627384	493.5057068	24	19020.33105	
	04	458.7228	783.8478394	3.230755	15.18195	8.7840538	9.062314987	0.022363801	17.54210472	421.0105	5.434408665	5.607600689	0.0227325	17.8187466	427.6499023	24	18812.34814	
	05	459.3217	784.8712769	3.229039	15.18499	9.53668308	9.843468666	0.024291487	19.07012939	457.6831	5.300386429	5.472091198	0.022183154	17.4110126	417.8643188	24	18836.91064	
	06	457.4124	781.6086426	3.237177	15.17059	9.63732338	9.923185349	0.024488233	19.14310455	459.4345	5.287508011	5.445053577	0.022073558	17.2530994	414.0744019	24	18758.60742	
	07	457.7466	782.1813965	3.247481	15.15236	9.75941753	10.01609421	0.024717521	19.33972549	464.1534	5.210559845	5.348633289	0.02168268	16.9602242	407.0454102	24	18772.35352	
	08	457.4369	781.6508179	3.212568	15.21412	10.4354296	10.82522488	0.02671423	20.8881073	501.3146	5.330276489	5.533133507	0.022430612	17.5317116	420.7611084	24	18759.61963	
	09	456.8873	780.7120972	3.266305	15.11902	8.15415764	8.399404526	0.020727865	16.11020279	386.6449	6.102304459	6.20490694	0.025153892	19.6883717	472.5209045	24	18737.09033	
	10	453.868	775.5529785	3.282902	15.08965	7.79214287	7.959212303	0.019641554	15.14001751	363.3604	6.091652393	6.16745472	0.02500207	19.4520245	466.8486023	24	18613.27148	
	11	458.566	783.5802002	3.251424	15.14537	7.46209764	7.696046829	0.018992135	14.81107235	355.4657	6.292926788	6.430817127	0.026069712	20.4810791	491.5458984	24	18805.9248	
	12	457.0301	780.9561768	3.285892	15.08435	7.18037891	7.342709064	0.018120172	14.10443783	338.5065	6.573215485	6.641350269	0.0269232	21.0656872	505.5765076	24	18742.94824	
	13	451.2254	771.0368042	3.263824	15.1234	9.66879368	9.874610901	0.024368346	18.79380417	451.0513	5.541090012	5.660307884	0.022946162	17.6980133	424.7522888	24	18504.8833	
	14	447.1732	764.1125488	3.286019	15.0841	9.27452278	9.404745102	0.023208825	17.74072456	425.7774	5.257937908	5.334499836	0.021625392	16.5237675	396.5704041	24	18338.70117	
	15	457.9774	782.5756836	3.306686	15.04752	7.650177	7.769353825	0.019158231	14.88714027	357.2914	6.222177982	6.25128746	0.025341934	19.9059086	477.7417908	24	18781.81641	
	16	459.9366	785.9227905	3.278919	15.0967	7.26711321	7.43789196	0.018355062	14.34941673	330.0366	6.279196739	6.363682747	0.025797565	20.3280258	467.5445862	24	18862.14697	
	17	458.5469	783.5473633	3.261789	15.12702	8.46109867	8.697351456	0.021463128	16.77292252	402.5501	5.851266384	5.965299129	0.024182566	18.9790115	455.4963074	24	18805.13672	
	18	460.1455	786.27948	3.281504	15.09212	8.1627388	8.363724709	0.020639831	16.13549805	387.252	6.184498787	6.256810665	0.0253643	20.0071869	480.1724854	24	18870.70752	
	19	456.1675	779.4819336	3.278515	15.09743	7.92235756	8.098492622	0.01998527	15.50088978	372.0214	6.031078339	6.114280224	0.024786504	19.3746834	464.9924011	24	18707.56641	
	20	335.5914	688.1338501	2.912697	14.17737	11.2599192	25.53477859	0.063014187	18.42118454	368.4237	5.603631973	6.423892975	0.02604164	17.4323406	348.6468201	19.81944	13638.43076	
	21	460.8463	787.4767456	3.250026	15.14787	10.2420979	10.50478363	0.02592347	20.42562866	490.2151	5.774002075	5.922563553	0.024009317	18.9077454	453.7858887	24	18699.44189	
	22	465.3518	795.1754761	3.282011	15.09123	8.92490292	9.128458977	0.022527011	17.8398304	428.1559	6.459542274	6.540517807	0.026514407	21.1260414	507.0249939	24	19084.21143	
	23	463.4368	791.9034424	3.280931	15.09314	9.65575886	9.873979568	0.024366796	19.22273254	461.3456	6.231558323	6.31312418	0.025592608	20.3075256	487.3805847	24	19005.68262	
	24	460.9012	787.5705566	3.236457	15.17183	10.4559803	10.82712269	0.026718948	20.9442749	502.6626	6.067591667	6.234498024	0.025273861	19.9523869	478.8572998	24	18901.69336	
	25	455.4589	778.270752	3.216638	15.20692	11.8879061	12.31790447	0.030397855	23.66291618	567.91	5.40626955	5.604044437	0.022718079	17.6804867	424.3316956	24	18678.49805	
	26	462.5303	790.3543091	3.254603	15.13974	9.19773102	9.474944115	0.023382055	18.37952232	441.1085	6.348095417	6.483437061	0.026283033	20.8309536	499.9429016	24	18968.50342	
	27	458.6377	783.7023315	3.236352	15.17205	9.76987596	10.05888939	0.024823099	19.46105766	467.0654	5.81470108	5.989631653	0.024281207	19.0297699	456.7145081	24	18808.85596	
	28	457.7587	782.2000732	3.258928	15.13208	10.1928101	10.42632389	0.025729854	20.12386322	482.9727	5.618673325	5.747412682	0.023299284	18.2279129	437.4699097	24	18772.80176	
	29	457.6347	781.9890137	3.250724	15.14661	11.2400503	11.52227116	0.028434383	22.24518776	533.8845	5.485602379	5.625733852	0.022806004	17.8335419	428.0050049	24	18767.73633	
	30	456.4207	779.9140625	3.276289	15.10136	9.13556004	9.361186028	0.023101311	17.93361664	430.4068	6.051429749	6.137217045	0.024879513	19.4483547	466.760498	24	18717.9375	
	31	459.3242	784.8759155	3.25719	15.13517	8.66692715	9.131814003	0.022535287	17.58572769	422.0575	6.198596478	6.324570179	0.025639005	20.1813374	484.3521118	24	18837.02197	
Aug02	01	458.0366	782.6743164	3.234378	15.17553	8.57879353	8.891087532	0.021941246	17.11325455	408.0386	6.248518467	6.420973778	0.026029818	20.4624004	368.3231812	24	18784.18359	
	02	457.8825	782.411377	3.267767	15.11643	7.79533005	8.015338898	0.019780083	15.39475155	369.474	6.373530865	6.479113579	0.026265513	20.6025543	494.4613037	24	18777.87305	
	03	458.3682	783.2423096	3.254794	15.1394	10.0721521	10.31497669	0.025455104	19.93664169	478.4794	5.676223755	5.813924789	0.023568913	18.4622135	443.0931091	24	18797.81543	
	04	461.3521	788.3405762	3.241503	15.16293	10.3621292	10.65389633	0.026291467	20.72855759	497.4854	5.765734673	5.929891586	0.024039021	18.9513702	454.8328857	24	18920.17383	
	05	461.2968	788.246582	3.24616	15.1547	10.1394501	10.41059113	0.025891018	20.25880051	485.9524	5.767683029	5.923224449	0.024011992	18.9294262	435.3768005	24	18917.91797	
	06	465.5	795.4289551	3.239899	15.16578	9.83022404	10.11154079	0.02495303	19.82105637	455.8843	5.916879177	6.088158131	0.024680613	19.5946255	450.6763916	24	19090.29492	
	07	463.0545	791.2510986	3.244747	15.15719	10.172575	10.44966507	0.025787437	20.40932846	489.8239	5.850949764	6.011271477	0.024368925	19.2823677	462.7767944	24	18990.02637	
	08	463.6017	792.1851807	3.27419	15.10508	8.62109756	8.828686714	0.02178723	17.19064903	412.5756	6.351273537	6.448012352	0.026139408	20.7519798	498.0474854	24	19012.44434	
	09	460.4726	786.8382568	3.281186	15.0927	7.95860481	8.13920784	0.020085772	15.74117184	377.7881	6.433787823	6.515782356	0.02641415	20.8287296	499.8894958	24	18884.11816	
	10	454.7614	777.0784302	3.252315	15.1438	8.76593113	8.983732224	0.022169862	17.23059654	413.5343	5.753490925	5.897628784	0.023908226	18.5791378	445.899292	24	18649.88232	
	11	455.8734	778.9797363	3.250024	15.14785	9.31760597	9.55548954	0.023580838	18.37343407	440.9624	5.742362976	5.890115261	0.023877779	18.6005421	446.4129944	24	18695.51367	
	12	458.9946	784.3126221	3.285127	15.08572	7.49723291	7.653745174	0.018887747	14.72943306	353.5064	6.51295948	6.58816576	0.026707584	21.0114212	504.2741089	24	18823.50293	
	13	458.0467	782.6930542	3.301853	15.05609	7.42871141	7.549161911	0.018629652	14.51526928	348.3665	6.52122879	6.563622952	0.0266081	20.8790531	501.09729	24	18784.6333	
	14	457.7283	782.1483765	3.28038	15.09411	7.18943977	7.335560799	0.018102532	14.09105301	338.1853	6.516192913	6.608108997	0.026788441	21.0046291	504.111084	24	18771.56104	
	15	457.2772	781.37854	3.291234	15.07488	7.19373178	7.348726749	0.018135035	14.09533978	338.2881	6.530290604	6.587024212	0.026702963	20.923912	502.1738892	24	18753.08496	
	16	457.0745	781.0311279	3.319977	15.024	7.31058502	7.395689487	0.018250925	14.16662392	340.047	6.499923706	6.501933575	0.026358016	20.6538296	495.6918945	24	18744.74707	
	17	351.6579	686.666687	2.948281	13.94226	12.0002718	18.17522812	0.044852424	19.81583786	416.1326	5.229654312	5.557079792	0.022527695	16.2070961	340.3490295	20.59167	14139.61188	
	18	454.6976	776.9703979	3.284938	15.08603	9.58167744	9.72342968	0.023995267	18.64419937	447.4608	5.859375954	5.946793556	0.024107549	18.7320175	449.5683899	24	18647.28955	
	19	462.2061	789.800354	3.319851	15.02423	8.28086281	8.376574516	0.020671507	16.20703697	388.9689	6.746350288	6.749754906	0.02736265	21.6894379	520.5465088	24	18955.2085	
	20	461.1812	788.0494385	3.294096	15.06981	9.96705437	10.08596802	0.02488992	19.61679077	470.803	5.911045551	5.982009411	0.024250308	19.1106663	458.6560059	24	18913.18652	
	21	465.4507	795.3444214	3.2516	15.14504	9.59580612	9.838226318	0.024278557	19.30611229	444.0406	6.091070652	6.244585991	0.025314748	20.1312389	463.0184937	24	19068.26611	
	22	464.3107	793.3963623	3.271391	15.11	10.5031471	10.70262527	0.026411755	20.95705795	502.9694	5.945861816	6.060865402	0.024569983	19.4972591	467.9342041	24	19041.5127	
	23	464.4589	793.6498413	3.279978	15.09479	11.2697811	11.45338917	0.028264433	22.44513702	538.6833	5.849359512	5.944927216	0.024099953	19.1285954	459.0863037	24	19047.59619	
	24	461.6399	788.8334351	3.271265	15.11021	11.7535667	11.97749138	0.029557796	23.32275391	559.7461	5.749199867	5.858852386	0.023751037	18.7364006	449.673584	24	18932.00244	
	25	463.1645	791.4387207	3.273937	15.10549	12.4231958	12.64715385	0.031210337	24.70653725	592.9569	5.760009766	5.865141869	0.023776529	18.8177624	451.6263123	24	18994.5293	
	26	463.5221	792.0490723	3.270247	15.11203	11.7297125	11.95478725	0.029501759	23.37945366	561.1069	5.868278027	5.982274532	0.024251375	19.209301	461.0231934	24	19009.17773	
	27	463.7307	792.4058838	3.295176	15.0679	9.00059032	9.158841133	0.022601979	17.84319496	428.2367	6.590228558	6.649048328	0.026954392	21.400404	513.6096802	24	19017.74121	

	28	459.1397	784.5614014	3.158742	15.3094	10.317626	10.88854313	0.026870491	21.07360077	484.6928	5.909747124	6.239685059	0.025294887	19.8339729	456.1813965		24	18829.47363	
	29	464.5688	793.8375244	3.243094	15.1601	8.68198395	9.033244133	0.022292053	17.5691819	422.1404	6.692136288	6.848737717	0.027763916	22.09935	530.3843994		24	19052.10059	
	30	462.3358	790.0209351	3.289263	15.07839	9.365942	9.556282997	0.023582762	18.5227108	444.545	6.484980106	6.552086353	0.026561333	21.0407295	504.9775085		24	18960.50244	
	31	455.6347	778.571228	3.259118	15.13173	10.5758057	10.81684971	0.026693605	20.78267097	498.7841	5.65349102	5.782910824	0.023443189	18.2534618	438.0830994		24	18685.70947	
Sep02	01	455.937	779.0876465	3.260199	15.12984	10.993926	11.24061584	0.027739309	21.62697411	519.0474	5.663665771	5.79131031	0.023477238	18.2900791	438.9619141		24	18698.10352	
	02	455.4778	778.3037109	3.25244	15.14357	10.7637119	11.03020668	0.027220096	21.18939972	508.5456	5.697371006	5.839907169	0.023674237	18.4260921	442.2261963		24	18679.28906	
	03	460.379	786.6787109	3.291805	15.07388	8.6322155	8.801743507	0.021720758	17.01841354	408.4419	6.507236958	6.569762707	0.026632993	20.9946365	503.8713074		24	18880.28906	
	04	462.9695	791.1054077	3.288371	15.07997	8.25892544	8.433421135	0.020811781	16.35596466	392.5432	6.606761456	6.676556587	0.027065916	21.4716663	515.3200073		24	18986.52979	
	05	465.5273	795.4760132	3.257402	15.13479	11.3018913	11.56567097	0.028541492	22.70678711	544.9629	5.847134113	5.983733654	0.024257291	19.2975082	463.1401978		24	19091.42432	
	06	465.5941	795.588623	3.260519	15.12928	10.7923374	11.0324707	0.027225696	21.66616249	519.9879	5.882110596	6.014169693	0.02438068	19.3979244	465.5502014		24	19094.12695	
	07	428.0909	731.5054321	2.97759	14.32375	11.20364	18.33161545	0.045238376	22.60116959	542.4281	5.593713284	6.160807133	0.024975121	18.568327	445.6398621		24	17556.13037	
	08	470.5057	803.9820557	3.237645	15.16972	11.6020536	11.94359589	0.029474158	23.70252037	568.8605	5.937171459	6.114482403	0.024787337	19.4278639	478.2879028		24	19295.56934	
	09	465.3625	795.1941528	3.23794	15.1692	10.0629168	10.37843704	0.025611684	20.39987564	489.597	5.94840765	6.125682354	0.024832742	19.7491131	473.9786987		24	19084.65967	
	10	461.1566	788.0072632	3.254731	15.13951	9.80728149	10.04282093	0.024783438	19.53468323	468.8324	5.906116962	6.049115181	0.024522325	19.3247032	463.7929077		24	18912.17432	
	11	462.1241	765.0200195	3.250985	15.16085	9.65458012	9.92491436	0.024504764	18.75543213	412.6195	5.892661572	6.056008671	0.024570905	18.7906399	413.394104		24	18360.48047	
	12	461.333	753.0404053	3.258801	15.15464	9.60234928	9.859946251	0.024350971	18.3426342	440.2232	5.926149368	6.085679531	0.024689846	18.5938301	446.2518921		24	18072.96973	
	13	464.4952	758.2019653	3.280905	15.11585	8.9776947	9.204096794	0.022731261	17.14955521	411.5893	6.43473959	6.5481143	0.026565738	20.1919785	484.6075134		24	18196.84717	
	14	358.2468	668.3101807	2.902227	14.04356	12.8681288	22.85774422	0.056451354	23.92020988	502.3244	5.31117487	6.106791019	0.024775291	16.5670395	347.9078369	20.66389	13809.88734		
	15	462.753	755.3589478	3.264141	15.14523	11.4702501	11.75692463	0.029035913	21.93855858	526.5254	5.826782703	5.974103928	0.024236972	18.3082256	439.3973999		24	18128.61475	
	16	469.2636	765.9868774	3.258356	15.15543	12.5876083	12.93160439	0.031937052	24.46801758	587.2324	5.906752586	6.06662178	0.02461233	18.8529797	452.4714966		24	18383.68506	
	17	467.9973	763.9195557	3.251423	15.16764	12.3081083	12.66874123	0.031287815	23.91860771	574.0466	5.906434536	6.079408646	0.024664205	18.842371	452.2169189		24	18334.06934	
	18	464.3292	757.9328003	3.231796	15.20226	11.3105211	11.70982933	0.028919592	21.9251709	526.2041	5.841250896	6.048736572	0.024539754	18.5995255	446.3886108		24	18190.38721	
	19	461.2007	752.8251953	3.245827	15.17751	10.8317671	11.16770458	0.027580738	20.77054977	498.4932	5.839820862	6.021684647	0.024430016	18.3919964	441.4078979		24	18067.80469	
	20	465.1511	759.2737427	3.28869	15.10195	8.90678501	9.129216102	0.022546325	17.03079414	408.7391	6.615345478	6.710315228	0.027223783	20.7186661	497.2479858		24	18222.56982	
	21	461.228	752.8699951	3.258992	15.15429	11.9532499	12.27436256	0.030313862	22.82497978	547.7995	5.708499432	5.861840248	0.023781525	17.9050465	429.7210999		24	18068.87988	
	22	460.9129	752.354187	3.264014	15.14544	12.2491169	12.55698299	0.03101185	23.33885765	560.1326	5.658102036	5.801258087	0.023535745	17.7077675	424.9863892		24	18056.50049	
	23	463.577	756.7041016	3.291298	15.09735	9.25861168	9.477165222	0.023405621	17.62290192	422.9497	6.438397408	6.526358128	0.026477475	20.0832329	481.9975891		24	18160.89844	
	24	464.6541	758.4619751	3.289963	15.09971	9.00328636	9.224843025	0.022782473	17.18546295	412.4511	6.545234203	6.636118412	0.026922762	20.4717541	491.322113		24	18203.0874	
	25	460.379	751.484375	3.212885	15.23557	10.266737	10.68758106	0.02639495	19.8394928	476.1478	5.896737576	6.144145966	0.024926851	18.73172	449.5613098		24	18035.625	
	26	462.9976	755.7579346	3.2319	15.20207	9.64224815	9.98433876	0.024658179	18.6420002	447.408	5.993239403	6.207436562	0.025183612	19.0336914	456.8085938		24	18138.19043	
	27	465.5909	759.991272	3.264015	15.14545	9.06068611	9.288489342	0.022939641	17.43696594	418.4872	6.039503574	6.192486763	0.025122957	19.0939751	458.2554016		24	18239.79053	
	28	467.3628	762.889606	3.272664	15.13019	9.82651329	10.04743671	0.024814008	18.93418694	454.4205	5.981475353	6.116457462	0.024814505	18.9303703	454.3288879		24	18309.20654	
	29	466.1647	760.9285278	3.262743	15.14768	9.80966187	10.0627346	0.024851816	18.90945053	453.8268	5.875909805	6.026614189	0.024450017	18.6056461	446.5354919		24	18262.28467	
	30	468.2941	764.4038696	3.255875	15.15979	11.0759678	11.37906647	0.028102743	21.49460411	515.8705	5.860488415	6.023914814	0.024439067	18.6807632	448.3382874		24	18345.69287	
Oct02	01	472.1627	770.7177734	3.2464	15.1765	9.98709106	10.29468441	0.02542465	19.59797859	470.3515	6.089266777	6.277197361	0.025466521	19.6281166	471.0747986		24	18497.22656	
	02	472.3001	770.9421387	3.194111	15.26868	10.1376143	10.63208771	0.02625794	20.3889389	488.9456	6.298110962	6.596885204	0.026763605	20.7213001	476.5899048		24	18502.61133	
	03	476.2564	777.3995361	3.217721	15.22707	10.5176258	10.9424181	0.027024329	21.01701736	504.4084	6.137756348	6.385337353	0.02590535	20.1424541	483.4189148		24	18657.58887	
	04	472.8737	771.8791504	3.251995	15.16664	9.16641045	9.436223984	0.023304526	17.99992561	431.9982	6.175278187	6.355358124	0.025783742	19.9038963	477.693512		24	18525.09961	
	05	471.0877	768.9643555	3.262235	15.14859	9.68978977	9.939571381	0.024547629	18.8770256	453.0486	5.990379333	6.145407677	0.024931941	19.1755047	460.2120972		24	18455.14453	
	06	467.2968	762.776062	3.261853	15.14925	9.91904449	10.17676926	0.025133429	19.17749977	460.26	5.771456242	5.921253681	0.024022562	18.3272629	439.8543091		24	18306.62549	
	07	462.8928	755.5876465	3.249241	15.1715	8.79052067	9.051078796	0.022353329	16.89633751	405.5121	5.779247761	5.952690601	0.024150113	18.2475128	437.9403076		24	18134.10352	
	08	458.3655	748.1972656	3.246146	15.17696	7.68419838	7.922904491	0.019567084	14.6472576	351.5342	5.908342838	6.091384888	0.024712779	18.4923286	443.815918		24	17956.73438	
	09	457.1869	746.2734985	3.253755	15.16354	7.47428703	7.686876774	0.018984184	14.16923332	340.0616	5.936430931	6.105697155	0.024770834	18.4866295	443.6791077		24	17910.56396	
	10	458.6479	748.6591797	3.257274	15.15734	7.20327139	7.400707722	0.018277422	13.68410397	328.4185	6.026628494	6.191757679	0.025119988	18.8084545	451.4028931		24	17967.82031	
	11	462.9722	755.7176514	3.269039	15.13659	8.40169621	8.601052284	0.021241896	16.05023003	385.2055	5.956038475	6.097203732	0.024736401	18.6959743	448.7033997		24	18137.22363	
	12	460.6626	751.9463501	3.264843	15.14398	9.72476292	9.968312263	0.024618588	18.51524162	444.3658	5.744588375	5.888384819	0.023889208	17.9650173	431.1604004		24	18046.7124	
	13	457.4259	746.6635742	3.259437	15.15352	9.02634525	9.268398285	0.022890026	17.1025753	410.4618	5.744747162	5.898276806	0.023929354	17.8679867	428.8316956		24	17919.92578	
	14	456.2994	744.8250122	3.261598	15.1497	8.31648064	8.532914162	0.021073621	15.70017052	376.8041	5.864302635	6.017036915	0.024411162	18.1822453	436.3739014		24	17875.80029	
	15	457.6019	746.9506226	3.264778	15.1441	7.54683638	7.736719608	0.019107262	14.27568749	342.6213	6.045068741	6.196494102	0.02513922	18.7782001	450.6767883		24	17926.81494	
	16	460.2307	751.2421875	3.243411	15.18175	7.23220634	7.461267471	0.018426996	13.84692097	332.3261	6.189585209	6.386315823	0.025909321	19.4649715	467.1593018		24	18029.8125	
	17	459.0776	749.3588257	3.266367	15.14129	7.29993343	7.479418755	0.018471804	13.84578323	332.2988	6.071620464	6.220998764	0.025238629	18.914505	453.9480896		24	17984.61182	
	18	461.7617	753.7401733	3.299438	15.083	8.22506618	8.34377861	0.020606516	15.53915024	372.9396	6.196103573	6.282418251	0.025487816	19.2119217	461.0860901		24	18089.76416	
	19	462.3541	754.7085571	3.269674	15.13547	8.87674046	9.084022522	0.022434691	16.9376049	406.5025	5.883541584	6.021854401	0.024430709	18.4387207	442.5292969		24	18113.00537	
	20	460.5582	751.7758179	3.262045	15.14892	8.26465225	8.478014946	0.020938043	15.74915791	377.9798	5.882268906	6.034818649	0.024483301	18.4069462	441.7666931		24	18042.61963	
	21	459.4158	749.9103394	3.265033	15.14367	7.5857873	7.77477932	0.019201271	14.40224552	345.6539	5.920743465	6.068722725	0.02462085	18.4642124	443.1411133		24	17997.84814	
	22	463.4503	756.4979248	3.270503	15.134	8.15813351	8.346660614	0.020613637	15.59740448	374.3377	5.943159103	6.081417561	0.024672341	18.6649837	447.9595947		24	18155.9502	
	23	464.0359	757.4530029	3.259055	15.1542	8.66338634	8.894636062	0.021966971	16.64342117	399.4421	5.92757988	6.086559772	0.024693197	18.7050743	448.9217834		24	18178.87207	
	24	466.063	760.7624512	3.241884	15.18445	8.76656628	9.049424171	0.022349238	17.004179	408.1003	5.967484951	6.159958363	0.02499098	19.012558	456.3013916		24	18258.29883	
	25	463.0988	755.9238892	3.253586	15.16383	7.89835262	8.125544548	0.02006755	15.17471218	364.1931	6.14252615	6.318041801	0.025632326	19.3767204	465.0412903		24	18142.17334	
	26	463.9615	757.3319092	3.261534	15.14983	7.75446987	7.955358982	0.019647243	14.88424206	357.2218	6.134895802	6.294966946	0.025538333	19.3408375	464.1801147		24	18175.96582	
	27	465.2453	759.4262695	3.266177	15.14164	8.33587646	8.539960861	0.021091016	16.02144623	384.5147	6.016293526	6.164532661	0.025009543	18.9939365	455.8544922		24	18226.23047	
	28	464.7281	758.583252	3.254794	15.16172	8.62093544	8.862000465	0.021886375	16.60762024	396.5829	5.97781992	6.146371841	0.024935879	18.9166622	453.9999084		24	18205.99805	
	29	463.4949	756.5696411	3.253585	15.16383	7.93762112	8.164207458	0.020163033	15.25774193	366.1858	6.071936607	6.245790005	0.025339196	19.1718006	460.1231995		24	18157.67139	

	30	457.5827	746.9191895	3.231266	15.20319	6.57242107	6.789330006	0.016767507	12.59388447	302.2532	6.19944334	6.422186375	0.026054854	19.451292	466.8309937	24	17926.06055
	31	466.3409	761.2154541	3.247673	15.17426	7.73984432	7.97072649	0.019685192	15.00347519	360.0834	6.225514869	6.415493011	0.026027687	19.8099327	475.438385	24	18269.1709
Nov02	01	472.5688	771.3814097	3.254923	15.16149	9.12014771	9.375720978	0.023155091	17.86506653	428.7616	6.195785046	6.370228767	0.025844058	19.9356213	478.454895	24	18513.15381
	02	470.5736	768.1258545	3.236925	15.1932	8.41664124	8.69953537	0.02148512	16.51325798	396.3182	6.258426666	6.470508099	0.026250884	20.162838	483.9080811	24	18435.02051
	03	471.2306	769.1976929	3.243729	15.1812	8.33269787	8.595486641	0.021228146	16.34231186	392.2155	6.203576565	6.400268555	0.025965936	19.9708214	479.2996826	24	18460.74463
	04	471.6651	769.906189	3.254286	15.1626	8.73158932	8.978081703	0.022173045	17.07422447	409.7814	6.246501923	6.423570156	0.026060482	20.0652828	481.566803	24	18477.74854
	05	471.9204	770.3231812	3.243728	15.1812	9.26704502	9.559584618	0.023609154	18.19817924	436.7563	6.209618568	6.406497002	0.025991203	20.0217743	480.522583	24	18487.75635
	06	470.3684	767.7895508	3.235455	15.19581	8.7440958	9.038566589	0.022322418	17.15271759	394.5125	6.191936493	6.404435158	0.025982847	19.9445782	458.7253113	24	18426.94922
	07	464.7751	758.6593628	3.257825	15.15636	8.55665207	8.787664413	0.021702779	16.47990417	395.5177	5.989689827	6.154482365	0.024968775	18.9466286	454.7190857	24	18207.82471
	08	455.179	742.9954224	3.265669	15.14252	7.62208939	7.809084415	0.019285992	14.33257866	343.9819	5.724503517	5.866662979	0.023801096	17.6846161	424.4308167	24	17831.89014
	09	459.0058	749.2421265	3.287035	15.10486	8.32283974	8.47028923	0.020918967	15.68758297	376.502	5.783698082	5.8884902	0.023889642	17.8998833	429.5971985	24	17981.81104
	10	468.9696	765.507019	3.275908	15.12448	10.2568779	10.48020172	0.025882784	19.81742859	475.6183	5.923604965	6.050976276	0.024548855	18.7925167	451.0203857	24	18372.16846
	11	468.7443	765.1393433	3.257912	15.15621	11.1677036	11.47060394	0.028328767	21.67964554	520.3115	5.818516731	5.976790905	0.024247872	18.5528831	445.2691956	24	18363.34424
	12	463.8323	757.1212769	3.264651	15.14432	9.51793194	9.75749588	0.024097946	18.26974106	438.4738	5.828531742	5.974823475	0.0242399	18.3538494	440.4924011	24	18170.91064
	13	463.9124	757.2512207	3.217381	15.22766	8.82378101	9.180617332	0.022673244	17.16486549	394.7919	5.856935978	6.092569351	0.024717599	18.7116528	430.3680115	24	18174.0293
	14	463.1619	756.0269775	3.246844	15.17571	8.50233459	8.761926651	0.021639204	16.36642456	392.7942	6.055084705	6.240082264	0.02531605	19.1382294	459.3175049	24	18144.64746
	15	463.2172	756.1167603	3.265987	15.14197	8.15829182	8.358375549	0.020642554	15.61897945	374.8555	5.988471031	6.136668682	0.024896504	18.8274994	451.8599854	24	18146.80225
	16	464.7148	758.56073	3.27031	15.13434	8.65416622	8.855038643	0.021869158	16.60668373	398.5604	6.019472599	6.160776615	0.024994329	18.96558	455.1738892	24	18205.45752
	17	465.278	759.4801025	3.265286	15.1432	8.81616974	9.033276558	0.022309367	16.94549942	406.692	6.022652149	6.172772884	0.025042992	19.0225258	456.5405884	24	18227.52246
	18	466.0526	760.7445068	3.256188	15.15924	8.76397896	9.006011009	0.022242032	16.9361496	372.5953	6.045345306	6.213117599	0.025206655	19.1922226	422.2289124	24	18257.86816
	19	467.4207	762.9780273	3.269279	15.13617	9.20850372	9.426574707	0.023280686	17.74140549	372.5695	6.021486759	6.1644454	0.0250092	19.0554905	400.1653137	24	18311.47266
	20	461.3299	753.0358887	3.286616	15.10561	7.94308853	8.086256027	0.019970505	15.04348278	346.0001	6.040086269	6.150808811	0.024953878	18.7939224	432.2601929	24	18072.86133
	21	459.9225	750.7400513	3.303571	15.07571	8.04143906	8.143381119	0.020111591	15.08250046	331.815	5.9839468	6.062319756	0.024594864	18.4296856	405.4530945	24	18017.76123
	22	458.7007	748.7443848	3.327673	15.03322	7.53650379	7.578976154	0.018717701	14.02037907	336.4891	6.01740551	6.052057266	0.024553245	18.3860798	441.2658997	24	17969.86523
	23	431.1157	703.7167358	3.075205	14.17209	7.96146727	13.20712566	0.032617405	14.41978741	346.0749	5.756194115	6.220188141	0.025235359	17.8114395	427.4745178	24	16889.20166
	24	68.3672	669.5817261	2.985985	15.63562	17.2301083	47.95468903	0.118433081	20.52120018	82.0848	6.879260063	8.184060097	0.033202726	20.4047737	81.61909485	3.616667	2421.654154
	25	472.8712	771.8747559	3.329136	15.03064	5.31246758	5.339957237	0.013188	10.19227695	244.6146	6.915031433	6.951145172	0.028200863	21.7656746	522.3762207	24	18524.99414
	26	476.698	778.1216431	3.170994	15.30943	6.55403566	6.91902256	0.017087823	13.28912258	292.3607	6.812456608	7.200922966	0.029214196	22.717308	499.7807922	24	18674.91943
	27	477.9974	780.2425537	3.233554	15.19915	6.11279535	6.312551022	0.015590008	12.16509628	291.9623	6.990390301	7.255318642	0.029434871	22.970417	551.289978	24	18725.82129
	28	475.797	776.6507568	3.317752	15.05072	6.35413504	6.408201218	0.015826238	12.29436684	295.0648	6.826160431	6.885370731	0.027934004	21.6964912	520.7158203	24	18639.61816
	29	420.0715	715.5020142	3.066106	14.13132	6.08369495	9.513086319	0.023494322	11.49721336	264.4359	6.407435894	6.899971962	0.027993226	20.2655144	466.106842	23	16456.54633
	30															0	0
Dec02	01															0	0
	02															0	0
	03															0	0
	04															0	0
	05															0	0
	06															0	0
	07															0	0
	08															0	0
	09															0	0
	10															0	0
	11															0	0
	12															0	0
	13															0	0
	14															0	0
	15															0	0
	16															0	0
	17															0	0
	18															0	0
	19	223.2336	624.6413574	2.111242	14.19208	13.9270487	32.39596939	0.080007784	27.44695282	384.2574	5.613330841	8.434373856	0.034218285	20.2832851	283.9660034	13.425	8385.810343
	20	501.1508	818.0371094	3.177974	15.29713	1.96568453	2.28138876	0.005634312	4.598351479	110.3604	6.884348869	7.087305546	0.028753245	23.5268669	564.6447754	24	19632.89063
	21	265.9777	694.656311	2.914156	13.67225	1.82429528	2.730059385	0.006742394	3.48119998	52.218	7.556559086	9.340159416	0.037893094	24.1665668	362.4985046	14.75	10246.18059
	22	472.745	771.6685791	3.43273	14.84799	2.98795581	2.907999039	0.007181843	5.426578999	130.2379	7.457327843	7.272197723	0.029503355	22.8523006	548.4552002	24	18520.0459
	23	500.7746	817.4227905	3.422427	14.86615	2.3715713	2.319969177	0.005729595	4.635041237	111.241	7.72855711	7.556899548	0.0306584	25.0916958	602.2006836	24	19618.14697
	24	508.0961	829.3737183	3.415622	14.87815	1.97744954	1.937047958	0.004783904	3.96923995	95.26176	7.641592026	7.485908985	0.030370396	25.1929169	604.6300049	24	19904.96924
	25	492.9064	804.5794067	3.409072	14.8897	3.85601163	3.783555031	0.009344191	7.504374504	180.105	6.933950424	6.806992054	0.027616017	22.2260246	533.4246216	24	19309.90576
	26	497.3105	811.7679443	3.401633	14.90283	2.56012821	2.516867399	0.006215876	5.036599636	120.8784	7.386737823	7.267642975	0.029484876	23.9404335	574.5704346	24	19482.43066
	27	339.1462	699.2770996	2.94015	13.51643	5.35179329	17.11651802	0.042272367	9.068906784	172.3092	6.584837437	7.164825916	0.029067721	21.1926727	402.6607971	18.15	12691.87909
	28	489.5055	799.02771	3.3816	14.93814	1.80733705	1.786613703	0.004412374	3.522353649	84.53649	7.631258488	7.553761005	0.030645646	24.4924793	587.819519	24	19176.66504
	29	489.607	799.1937256	3.423508	14.86425	2.55345154	2.495111704	0.00616214	4.867751598	116.826	7.414562225	7.248185635	0.029405942	23.5392838	564.9428101	24	19180.64941
	30	499.5085	815.3554077	3.41982	14.87076	2.00924587	1.965776682	0.004854851	3.955202818	94.92487	7.572751522	7.410068512	0.0300627	24.5176334	588.4232178	24	19568.52979
	31	499.5709	815.4584961	3.417128	14.87551	1.92254663	1.885162473	0.004655763	3.790375948	90.96902	7.637829781	7.478888988	0.030341912	24.7474174	593.9379883	24	19571.00391

Jan03	01	502.3823	820.0461426	3.395145	14.91426	2.23007488	2.197748661	0.005427749	4.453351498	106.8804	7.520127773	7.412315369	0.030071808	24.6615372	591.8768921	24	19881.10742	
	02	500.4205	816.8441772	3.406209	14.89475	2.31831217	2.277522802	0.005624766	4.597789764	110.347	7.375768661	7.246477604	0.02939903	24.0189877	576.4556885	24	19604.26025	
	03	495.9066	809.4763184	3.418039	14.87389	2.23770666	2.190870523	0.005410762	4.380561829	105.1335	7.3533535	7.199645042	0.029209005	23.6453285	567.487915	24	19427.43164	
	04	496.9827	811.2342529	3.420456	14.86962	2.67904878	2.620841742	0.006472658	5.25294733	126.0707	7.187373161	7.032075882	0.028529184	23.1460876	555.5061035	24	19469.62207	
	05	497.1949	811.5796509	3.401759	14.90261	2.53977823	2.497580528	0.006168241	5.007790565	120.187	7.257166386	7.139554501	0.02896522	23.5074081	564.1777954	24	19477.91162	
	06	499.1728	814.8083496	3.404621	14.89756	2.39223957	2.351395845	0.005807212	4.733922005	113.6141	7.335706234	7.210569859	0.02925333	23.8374596	572.098999	24	19555.40039	
	07	502.6759	820.5259399	3.414732	14.87972	2.68668008	2.631978273	0.00650016	5.337645531	128.1035	7.408200741	7.259939194	0.029453637	24.1702785	580.086731	24	19692.62256	
	08	499.7687	815.7814331	3.415686	14.87805	2.43866372	2.38905406	0.005900216	4.814960003	115.559	7.433797836	7.283474922	0.029549126	24.1065121	578.5562744	24	19578.75439	
	09	495.0963	808.1533203	3.396227	14.91235	2.36696076	2.332342386	0.005760156	4.655292511	111.727	7.249640942	7.142904758	0.028978804	23.4203835	562.0892334	24	19395.67969	
	10	493.6845	805.8485718	3.410535	14.88712	2.44247746	2.39648962	0.005918576	4.769809246	114.4754	7.105177402	6.97225666	0.028286496	22.7946663	547.0720215	24	19340.36572	
	11	495.3265	808.5299683	3.411235	14.88589	2.45424366	2.407367229	0.005945443	4.807710648	115.3851	7.105017185	6.970202923	0.028278159	22.8648834	548.7572021	24	19404.71924	
	12	494.6315	807.3955688	3.409963	14.88814	2.58190918	2.533756971	0.006257584	5.052889347	121.2693	7.041742325	6.910661221	0.028036596	22.6386127	543.3267212	24	19377.49365	
	13	495.1872	808.3014526	3.39502	14.91448	2.62372208	2.585886717	0.00638633	5.163199902	123.9168	7.036336422	6.935734749	0.028138321	22.7451668	545.8839722	24	19399.23486	
	14	497.7823	812.5391846	3.37926	14.94228	2.85998869	2.832490921	0.006995363	5.681367874	124.9901	7.164883137	7.09540844	0.02878611	23.3753872	514.2584839	24	19500.94043	
	15	498.1318	813.1087036	3.393048	14.91796	3.03898954	2.997353315	0.007402518	6.020282745	144.4868	7.150169373	7.052135468	0.028610567	23.263937	558.3344727	24	19514.60889	
	16	500.2086	816.4989624	3.39222	14.91942	3.1823945	3.13901782	0.007752388	6.333902836	152.0137	7.21296978	7.115692616	0.0288684	23.5740414	565.7769775	24	19595.9751	
	17	500.9175	817.6560059	3.404303	14.89811	3.12738585	3.074254274	0.007592442	6.209982395	149.0396	7.373383999	7.248292446	0.029406384	24.0443783	577.0651245	24	19623.74414	
	18	500.3604	816.7456055	3.412189	14.89421	3.05059624	2.991623402	0.007388372	6.036898613	144.8856	7.4541502	7.310754776	0.029659791	24.2242336	581.3815918	24	19601.89453	
	19	500.308	816.6604004	3.410535	14.88712	3.01148677	2.954645395	0.007297049	5.962009907	143.0882	7.462893009	7.322824955	0.029708751	24.2623119	582.2955322	24	19599.84961	
	20	505.3984	824.9700317	3.40513	14.89665	3.390347	3.331500769	0.008227762	6.791051865	162.9852	7.499299049	7.370154858	0.029900767	24.6683159	592.0396118	24	19799.28076	
	21	499.2856	814.9921875	3.406337	14.89454	3.22913504	3.171430826	0.007832437	6.388059616	153.3134	7.264797688	7.13687849	0.02895437	23.604229	566.5015259	24	19559.8125	
	22	494.2532	806.7767334	3.394192	14.91595	3.09511161	3.050505877	0.007533792	6.08008337	145.922	7.128863811	7.029439926	0.028518496	23.0091591	552.2197876	24	19362.6416	
	23	493.5438	805.6196899	3.388809	14.92545	3.14341569	3.103788614	0.007665387	6.176460743	142.0586	6.972479343	6.885425568	0.027934222	22.5026264	517.5604248	24	19334.87256	
	24	492.0378	803.1622314	3.410662	14.88689	3.18684554	3.126194954	0.007720721	6.201844215	148.8443	6.865268707	6.736908436	0.027331671	21.9517879	526.8428955	24	19275.89355	
	25	492.1356	803.319397	3.408247	14.89115	3.10210657	3.045327902	0.007521007	6.044910908	145.0779	6.880531788	6.756021023	0.027409233	22.0180168	528.432373	24	19279.66553	
	26	490.6956	800.9694214	3.402522	14.90126	3.06061172	3.00986886	0.00743343	5.95491861	142.918	6.855572701	6.742752075	0.027355384	21.9119377	525.8864746	24	19223.26611	
	27	491.1316	801.6824341	3.405829	14.89542	2.91212082	2.861109257	0.007066042	5.66677618	136.0026	7.044604778	6.922040462	0.028082782	22.5145378	540.348877	24	19240.37842	
	28	491.1151	801.6555786	3.417658	14.87456	2.92340827	2.86230135	0.007068985	5.668360233	136.0406	6.977989197	6.832811832	0.027720779	22.2228374	533.3480835	24	19239.73389	
	29	492.8738	804.5256348	3.394956	14.91461	3.19590759	3.150837898	0.007781581	6.261696339	150.2807	6.903901577	6.805313587	0.027609205	22.2123241	533.0958252	24	19308.61523	
	30	491.0767	801.5926514	3.396928	14.91113	3.29304743	3.243920326	0.008011466	6.423712254	154.1691	6.877988338	6.776040554	0.027490446	22.0364704	528.8753052	24	19238.22363	
	31	490.1013	800.0008545	3.398007	14.9092	3.08748031	3.04049325	0.007509063	6.009527683	144.2287	7.045081615	6.93817091	0.028148204	22.5202751	540.4866333	24	19200.02051	
Feb03	01	492.5109	803.9335938	3.418231	14.87355	2.85711217	2.797757149	0.006909585	5.556445599	133.3547	7.277993202	7.125620842	0.028908679	23.242384	557.8171997	24	19294.40625	
	02	496.4205	810.3150635	3.402203	14.90182	2.80941629	2.762214899	0.006821808	5.532497883	132.78	7.379106998	7.258747578	0.029448792	23.863554	572.7252808	24	19447.56152	
	03	498.7383	814.0997314	3.395909	14.91292	2.97921205	2.935246229	0.007249137	5.907017708	141.7684	7.397550583	7.290005684	0.029575599	24.0792713	577.9025269	24	19538.39355	
	04	496.9397	811.1626587	3.372417	14.95434	2.73646998	2.714736462	0.006704547	5.445002556	125.2351	7.507165432	7.449756145	0.030223722	24.5319614	564.2351074	24	19467.90381	
	05	497.2693	811.7006836	3.371997	14.95508	2.67475629	2.653917551	0.006554344	5.323523998	127.7646	7.60089159	7.543868542	0.030605529	24.842371	596.2169189	24	19480.81641	
	06	491.4284	802.1668091	3.358006	14.97975	2.37920427	2.369033813	0.005850772	4.704590797	112.9102	7.788971424	7.762845993	0.031493925	25.2648964	606.3574829	24	19252.00342	
	07	493.0689	804.8438721	3.40036	14.90506	1.82180429	1.794888735	0.004432807	3.573142052	85.75541	8.054795265	7.928299427	0.032165166	25.8841991	621.2208252	24	19316.25293	
	08	400.321	712.855896	2.956626	14.26239	4.9419322	27.59044838	0.068139993	9.609363556	211.406	7.381335258	9.253029823	0.037539609	23.988369	527.7441406	21.23611	15138.28671	
	09	502.2034	819.7545166	3.374604	14.95047	2.43548465	2.414319515	0.005962611	4.891853809	117.4045	7.948750019	7.881765366	0.031976379	26.2168159	629.2036133	24	19674.1084	
	10	500.1104	816.3374023	3.367101	14.96371	2.47745538	2.462044239	0.006080476	4.965990543	119.1838	7.882771492	7.83425951	0.031783648	25.9497128	622.7930908	24	19592.09766	
	11	490.5054	800.6600342	3.375601	14.94872	2.49144745	2.469389677	0.006098614	4.8863554	117.2725	7.519172668	7.455946445	0.030248821	24.2262211	581.4293213	24	19215.84082	
	12	486.5713	794.2383423	3.395399	14.91381	2.29939365	2.265713692	0.005595603	4.446900845	106.7256	7.388011932	7.28220892	0.029543966	23.4641418	563.1394043	24	19061.72021	
	13	489.9478	799.7496948	3.406529	14.8942	2.70830321	2.66024828	0.006569979	5.254619122	126.1109	7.238088608	7.110935211	0.028849129	23.0741081	553.7786255	24	19193.99268	
	14	494.5275	807.2250977	3.419884	14.87063	3.13629007	3.068956614	0.007579361	6.118690014	146.8486	7.070677757	6.918972015	0.028070325	22.6590424	543.8170166	24	19373.40234	
	15	491.1453	801.7047729	3.397689	14.90977	3.22913575	3.180325031	0.007854404	6.297685623	151.1445	6.924569607	6.820391655	0.027670383	22.1836205	532.4069214	24	19240.91455	
	16	494.3326	806.9067383	3.39241	14.91908	3.07921219	3.037593842	0.007501905	6.05351305	145.2843	7.089913845	6.994084358	0.028375041	22.8964119	549.513916	24	19365.76172	
	17	497.9029	812.7365723	3.386879	14.92885	3.01577878	2.979097128	0.007357434	5.981237411	143.5497	7.32918644	7.241929531	0.029380545	23.8789825	573.0955811	24	19505.67773	
	18	499.4786	815.3081523	3.378229	14.94409	3.1027441	3.07344532	0.007590446	6.189630032	148.5511	7.319965363	7.251074314	0.029417654	23.985054	575.6412964	24	19567.34766	
	19	500.4119	816.8308105	3.366147	14.96539	2.8661747	2.849060297	0.007036284	5.74887228	137.9729	7.507408142	7.463616848	0.030279942	24.7376709	593.7041016	24	19603.93945	
	20	500.3654	816.7545166	3.38427	14.93345	2.87476039	2.842340946	0.00701969	5.735271931	137.6465	7.429982662	7.347162247	0.02980748	24.3487587	584.3701782	24	19602.1084	
	21	500.5741	817.0953979	3.382109	14.93725	2.98288867	2.95144248	0.00728914	5.955920696	142.9421	7.350966454	7.272950649	0.029506411	24.116024	578.7846069	24	19610.28955	
	22	494.373	806.9740601	3.377339	14.94566	2.97857666	2.950997829	0.00728804	5.88320446	141.1969	7.250011444	7.183930397	0.029145246	23.5227451	564.5458984	24	19367.37744	
	23	490.1136	800.0186768	3.383317	14.93513	2.73819208	2.708423853	0.006688958	5.351851463	128.4444	7.326325417	7.247144222	0.029401718	23.5238457	564.5723267	24	19200.44824	
	24	488.1373	796.7945557	3.371107	14.95665	2.53024077	2.511981726	0.006203804	4.943986893	118.6557	7.394210815	7.340442181	0.029780209	23.7275829	569.4619751	24	19123.06934	
	25	490.2037	800.166748	3.386942	14.92873	2.40257406	2.373051167	0.005860693	4.690686703	112.5765	7.452877045	7.364490509	0.029877797	23.9067745	573.7625732	24	19204.00195	
	26	493.2609	805.157959	3.392411	14.91908	2.67237115	2.635768414	0.006509523	5.242341042	125.8162	7.389123917	7.289469242	0.029573437	23.8128052	571.5073242	24	19323.79102	
	27	496.2251	809.996521	3.380328	14.94039	2.64152837	2.614865065	0.006457895	5.231930733	125.5683	7.523783684	7.448547363	0.030218812	24.4775753	587.461792	24	19439.9165	
	28	493.5388	805.6108398	3.383317	14.93511	2.30479836	2.279528379	0.005629721	4.535769463	108.8585	7.596440315	7.513778687	0.030483454	24.5598869	589.4373169	24	19334.66016	
Mar03	01	495.261	808.4224854	3.382427	14.93668	2.201298	2.177705765	0.005378252	4.350356102	104.4085	7.68117857	7.599526405	0.030831333	24.9260998	598.2263794	24	19402.13965	
	02	496.7879	810.9158936	3.368118	14.96191	2.65599489	2.639747143	0.006519347	5.289435387	126.9464	7.49325943	7.444678578	0.030203922	24.4927921	587.8270264	24	19461.98145	
	03	494.2445	806.7631836	3.354255	14.98635	2.57650447	2.570215464	0.006347626	5.122600079	122.9424	7.578794003	7.561732292	0.030678004	24.7503376	594.0081177	24	19362.31641	
	04	493.2419	805.1265259	3.367737	14.96258	2.39033127	2.37534833	0.005866363	4.723724365	113.3694	7.638889313	7.590903282	0.030796342	24.7955799	595.0938721	24	19323.03662	

	05	496.5575	810.5392456	3.376386	14.94732	2.68524837	2.661766768	0.006573731	5.328142166	127.8754	7.557171345	7.489580154	0.03038528	24.6310577	591.1453857	24	19452.94189	
	06	493.2034	805.0639038	3.370281	14.95811	2.83644366	2.81627202	0.00695531	5.599208355	134.381	7.354624748	7.302753448	0.029627325	23.8547077	572.5130005	24	19321.53369	
	07	492.492	803.9021606	3.372507	14.95417	3.07825923	3.053959608	0.007542321	6.063902378	145.5337	7.315196514	7.259057522	0.029450029	23.6754532	568.2108765	24	19293.65186	
	08	18.59886	242.8743286	1.095847	5.034667	1.19429338	1.239886642	0.003062133	2.092196703	6.27659	2.433099985	2.47497344	0.010040999	7.33309984	21.9993	2.5	607.1858215	
	09	436.3624	777.034668	3.286158	15.1064	3.09412766	3.209423542	0.007926266	6.050611973	133.1135	7.716760159	9.017515182	0.036584109	24.5433636	539.9539795	21.49722	16704.08746	
	10	491.0301	801.5166016	3.372888	14.95351	3.21132874	3.186047554	0.007868537	6.306861877	151.3647	6.985779285	6.931088924	0.028119471	22.5396252	540.9509888	24	19236.39844	
	11	486.5409	794.1890869	3.378547	14.94353	3.05186701	3.022771597	0.0074653	5.930304527	142.3273	6.978941917	6.91300106	0.028046109	22.2764168	534.6340332	24	19060.53809	
	12	482.7588	788.0140991	3.375644	14.94864	3.05939341	3.032781124	0.007490019	5.903839588	141.6922	6.870197296	6.810698509	0.027631067	21.7762508	522.6300049	24	18912.33838	
	13	482.0081	786.7897949	3.380137	14.94073	2.99574447	2.965544224	0.007323963	5.764843941	138.3562	6.89483881	6.826467514	0.027695037	21.7922459	523.013916	24	18882.95508	
	14	485.5603	792.5881348	3.382173	14.93715	2.98461843	2.9527421	0.007292348	5.781315804	138.7516	6.926956177	6.853948116	0.027806517	22.0404453	528.9707031	24	19022.11523	
	15	480.8326	784.8704834	3.390503	14.92244	2.62610841	2.592343807	0.00540228	5.026132584	120.6272	7.010421753	6.919690609	0.028073238	22.037487	528.8997192	24	18836.8916	
	16	488.7115	797.7316284	3.396101	14.9126	2.51815677	2.481191635	0.006127764	4.888906956	117.3338	7.404864311	7.296786308	0.029603105	23.616045	566.7850952	24	19145.55908	
	17	493.7333	805.9291992	3.39292	14.9182	2.6453445	2.609120846	0.006443709	5.193245411	124.6379	7.409474373	7.307960033	0.029648449	23.8959217	573.5020752	24	19342.30078	
	18	496.1538	809.880188	3.390695	14.9221	2.79176998	2.755249262	0.0068046	5.510926723	132.2622	7.385149479	7.288887024	0.029571075	23.9499092	574.7977905	24	19437.12451	
	19	494.6488	807.4224243	3.375813	14.94835	3.02086616	2.994557858	0.007395618	5.97151804	143.3164	7.268454075	7.205179969	0.029231437	23.6040382	566.4968872	24	19378.13818	
	20	492.2197	803.458313	3.382872	14.93591	3.01100993	2.978263378	0.007355376	5.910409927	141.8498	7.150648594	7.074255943	0.028700292	23.0595341	553.428772	24	19282.99951	
	21	442.531	722.3508301	3.0415	13.86866	2.81142998	2.900146723	0.00716245	5.518910408	132.4538	6.718844414	7.442271709	0.030193329	21.5797043	517.9129028	23.75	17155.83221	
	22	486.9778	794.9020996	3.377147	14.946	3.13978672	3.111350775	0.007684058	6.107308865	146.5754	6.877670288	6.8152318	0.027649425	21.9824829	527.5795898	24	19077.65039	
	23	485.3406	792.2294922	3.380263	14.9405	3.13024664	3.098977566	0.007653504	6.064468861	145.5473	6.787844658	6.720058441	0.02726333	21.5994797	518.3875122	24	19013.50781	
	24	487.4227	795.62854	3.394065	14.91617	3.14694118	3.102522135	0.007662254	6.097252846	146.3341	6.835378647	6.739627838	0.027342726	21.7554035	522.1296997	24	19095.08496	
	25	488.9588	798.1353149	3.382999	14.93566	3.50529218	3.467686653	0.008564101	6.83582449	164.0598	6.728225231	6.655218124	0.02700028	21.5506592	517.2158203	24	19155.24756	
	26	485.7721	792.9335327	3.36462	14.96807	3.31609917	3.29752326	0.008143851	6.460873127	155.0609	6.67957592	6.643669128	0.026953408	21.376421	513.0341187	24	19030.40479	
	27	490.7478	801.0546875	3.366846	14.96415	2.65551996	2.639912844	0.006519754	5.226159096	125.4278	7.198978901	7.155680656	0.029030645	23.257967	558.1912231	24	19225.3125	
	28	489.519	799.0501099	3.38516	14.93187	2.72356343	2.691585064	0.006647368	5.314109802	127.5386	7.143175125	7.062002659	0.028650597	22.8931084	549.4345703	24	19177.20264	
	29	491.7058	802.6196899	3.394763	14.91495	3.15806866	3.113447428	0.007689237	6.170585632	148.0941	7.003587246	6.903321743	0.028006833	22.483942	539.614624	24	19262.87256	
	30	489.2366	798.5882568	3.383063	14.93555	3.06935716	3.036454678	0.007499091	5.987379551	143.6971	6.919005394	6.843191147	0.027762879	22.1799126	532.3178711	24	19166.11816	
	31	481.3844	785.7718506	3.367545	14.96292	2.84343958	2.82516551	0.006977277	5.488203526	131.7169	6.862248898	6.819692612	0.027667547	21.7433739	521.8410034	24	18858.52441	
Apr03	01	486.3214	793.8303833	3.390249	14.92289	2.5183146	2.486317635	0.006140423	4.874560356	116.9894	7.206609249	7.113941193	0.028861308	22.912117	549.8908081	24	19051.9292	
	02	489.9864	799.812439	3.359716	14.97672	2.33425665	2.324931383	0.005741855	4.591389179	96.41917	7.42884779	7.40077877	0.030025009	23.9967041	503.9307861	24	19195.49854	
	03	493.6235	805.7498169	3.348785	14.996	2.51847506	2.515978813	0.006213679	5.009426594	120.2262	7.475453377	7.470723152	0.030308766	24.4217377	586.1217041	24	19337.99561	
	04	492.9261	804.6108398	3.354063	14.98668	2.45917344	2.452997923	0.006058132	4.877971649	117.0713	7.432845592	7.416140556	0.030087346	24.2139168	581.1340332	24	19310.66016	
	05	5.741766	112.4684982	0.514345	4.318185	5.91804981	13.70300007	0.03384205	9.775950432	19.5519	3.121175051	8.097000122	0.032849699	8.1473999	16.2947998	2	224.9369965	
	06	459.7749	783.1281738	3.24742	14.87197	2.66640615	2.91177702	0.007191176	5.301093578	121.9251	7.775645256	8.564035416	0.034744356	25.3264313	582.5078735	23.52778	18425.26631	
	07	493.9837	806.3374634	3.367928	14.96225	3.10751247	3.086848259	0.007623547	6.147389889	147.5374	7.230774879	7.185474396	0.029151512	23.5102367	564.2457275	24	19352.09912	
	08	287.2856	662.0344849	2.795734	13.51221	6.55502558	21.13788605	0.052203856	12.62827778	214.6807	6.259651184	7.498546124	0.030421706	20.0901756	341.5329895	16.19444	10721.28083	
	09	488.0277	796.6150513	3.407144	14.8931	3.25563335	3.198724508	0.007899846	6.29623127	151.1096	6.512218952	6.400823593	0.025968187	20.7021542	496.8516846	24	19118.76123	
	10	487.231	795.3146973	3.444813	14.8267	3.40322328	3.305870533	0.008164464	6.494107246	155.8586	6.187199593	6.011061192	0.024386929	19.3966427	465.5194092	24	19087.55273	
	11	488.9696	798.1533203	3.440362	14.83453	3.36109257	3.268909216	0.008073181	6.444896698	154.6775	6.167169571	5.998989105	0.024337925	19.4268341	466.243988	24	19155.67969	
	12	489.8108	799.5254517	3.098587	15.4371	2.65509534	2.940365076	0.007261779	5.806578159	139.3579	5.864832878	6.309103966	0.025596067	20.4676914	491.2246094	24	19188.61084	
	13	489.2279	798.5747681	3.462238	14.79596	2.6723721	2.58336544	0.006380104	5.09596014	122.303	6.560813904	6.341828346	0.025728829	20.5475368	493.1408997	24	19165.79443	
	14	492.7826	804.3776855	3.439576	14.83593	2.29520464	2.233069658	0.005514982	4.435826778	106.4598	6.999559402	6.810874939	0.027631775	22.2277508	533.4660034	24	19305.06445	
	15	497.9642	812.8353271	3.443476	14.82905	2.74725342	2.669673443	0.006593255	5.360476017	128.6514	6.944285393	6.749276545	0.027381884	22.2569084	534.1657715	24	19508.04785	
	16	496.7393	810.835144	3.428556	14.85535	2.95158434	2.880776644	0.007114612	5.766702652	132.6342	7.057142735	6.888355732	0.027946113	22.6549911	521.0648193	24	19460.04346	
	17	494.1462	806.6017456	3.442585	14.83062	3.02367663	2.939161301	0.007258808	5.85530901	140.5274	6.912380219	6.719623089	0.027261559	21.9882793	527.718689	24	19358.44189	
	18	496.3001	810.1176758	3.434573	14.84475	3.09733796	3.01781249	0.007453049	6.038192272	144.9166	6.94174099	6.763834	0.027440937	22.231163	533.5479126	24	19442.82422	
	19	491.8162	802.7990723	3.439724	14.83566	2.97317123	2.892064571	0.007142496	5.735728741	137.6575	6.854618073	6.66908741	0.027056545	21.7209091	521.3018188	24	19267.17773	
	20	488.3625	797.1622314	3.443668	14.8287	2.75758791	2.679407597	0.006617296	5.277370453	126.6569	6.892932892	6.698384762	0.027175391	21.6640625	519.9375	24	19131.89355	
	21	491.6867	802.5883179	3.442205	14.83128	2.49780583	2.428367615	0.005997304	4.813714504	115.5292	7.134688718	6.93646574	0.028141305	22.5877457	542.105896	24	19262.11963	
	22	498.2443	813.2926025	3.44246	14.83084	2.77094197	2.693487883	0.006652073	5.411651134	129.8796	7.282605171	7.079494476	0.028721562	23.3599129	560.6378784	24	19519.02246	
	23	491.7769	802.7362061	3.424589	14.86234	3.03787708	2.969332457	0.007333324	5.887385368	141.2972	6.986414909	6.826897144	0.027696775	22.2329121	533.5899048	24	19265.66895	
	24	491.2391	801.8574219	3.433619	14.84643	3.14678335	3.06588006	0.007571761	6.072762966	145.7463	6.861771584	6.68866539	0.027135959	21.7620087	522.288208	24	19244.57813	
	25	493.7423	805.942749	3.437371	14.83981	3.05329823	2.972652912	0.007341522	5.917628288	142.0231	6.961137772	6.777269363	0.027495442	22.1603832	531.8491821	24	19342.62598	
	26	493.7691	805.9874268	3.423762	14.86379	3.03978467	2.971313715	0.007338212	5.914613724	141.9507	6.994841576	6.836976528	0.027737666	22.356451	536.5548096	24	19343.69824	
	27	491.9116	802.9559326	3.425735	14.86033	3.14296794	3.070140362	0.007582285	6.088925838	146.1342	7.062886238	6.899651051	0.027991941	22.4772491	539.4539795	24	19270.94238	
	28	492.6569	804.1712646	3.43152	14.85012	3.08746055	3.010157824	0.007434145	5.980222225	143.5253	7.100090027	6.924808502	0.028094005	22.5925045	542.2200928	24	19300.11035	
	29	492.5934	804.0682373	3.418674	14.87278	2.83851075	2.778150797	0.00686116	5.519495964	132.4679	7.226323128	7.073904037	0.028698867	23.0752926	553.8070068	24	19297.6377	
	30	492.9645	804.6735229	3.406911	14.89351	2.86092758	2.81003952	0.006939919	5.585720062	134.0573	7.166543961	7.039259911	0.028558329	22.9808044	551.5393066	24	19312.16455	
May03	01	489.5303	799.0680542	3.420329	14.86986	3.01450658	2.949453354	0.007284224	5.821334839	139.712	7.057322979	6.905624866	0.028016184	22.3891335	537.3391724	24	19177.6333	
	02	488.4039	797.2294312	3.435591	14.84295	2.842803	2.768888712	0.006838286	5.451105595	130.8265	7.043172359	6.860995293	0.027835108	22.1943798	532.6651001	24	19133.50635	
	03	484.2558	790.4580078	3.447865	14.8213	2.84391665	2.759959936	0.006816237	5.389060497	129.3374	6.928385258	6.725053787	0.027283587	21.5663128	517.5914917	24	18970.99219	
	04	489.4563	798.9470825	3.443222	14.8295	3.14026451	3.051635742	0.00753658	6.022399902	144.5376	6.928863525	6.734759331	0.027322983	21.8291454	523.8994751	24	19174.72998	
	05	486.7362	794.5074463	3.439025	14.8369	2.28689257	2.225321293	0.00549584	4.366611958	104.7987	7.192936897	6.999557972	0.028397258	22.5627213	541.5053101	24	19068.17871	
	06	484.0906	790.1890259	3.434382	14.84507	2.23548126	2.177944899	0.005378838	4.251401424	102.0336	7.250011921	7.064910412	0.028662391	22.6489258	543.5742188	24	18964.53662	

	07	483.1623	788.6732788	3.41397	14.88107	2.14422417	2.101979256	0.00519123	4.094383717	98.26521	7.240472794	7.09744072	0.028794371	22.7098242	545.0117798	24	18928.15869
	08	488.6291	797.5969849	3.41136	14.88567	2.10892916	2.069171667	0.005110204	4.076365948	97.83278	7.518536568	7.375801563	0.029923679	23.8679047	572.8297119	24	19142.32764
	09	490.533	800.704895	3.42071	14.8692	2.17363667	2.12631011	0.005251319	4.205071449	100.9217	7.513768673	7.351488113	0.029825041	23.8833828	573.2011719	24	19216.91748
	10	487.3053	795.435791	3.427516	14.8572	2.43739176	2.379671574	0.005877043	4.675343513	112.2082	7.290076733	7.117707253	0.028876588	22.9714661	551.3151855	24	19090.45898
	11	482.0078	786.7897339	3.429612	14.85349	2.36982298	2.312258244	0.00571055	4.493870258	107.8529	7.162410259	6.988807678	0.028353637	22.312479	535.4995117	24	18882.95361
	12	421.6676	718.2113037	3.168297	13.72397	2.44017649	2.415345192	0.005965146	4.558686256	104.8498	6.52970314	6.372753143	0.025854314	20.0990677	462.2785645	23	16518.85999
	13	356.9645	736.0150757	3.269791	15.13525	2.42573357	4.271110058	0.010548306	4.646924019	88.29156	7.039834023	8.86875248	0.035980638	21.6886635	412.0845947	18.24722	13430.23114
	14	481.0327	785.197937	3.39362	14.91694	2.14512467	2.114942789	0.005223246	4.101984978	98.44764	7.186365604	7.086617947	0.028750466	22.5743923	541.7854004	24	18844.75049
	15	478.148	780.4893188	3.404367	14.898	2.21465373	2.177145958	0.005376861	4.200882435	100.8212	7.024095535	6.906229973	0.028018622	21.872488	524.9396973	24	18731.74365
	16	480.148	783.7539673	3.4216	14.86761	2.46378279	2.40959549	0.005950944	4.664646626	111.9515	6.98943615	6.835933685	0.027733438	21.7375126	521.7003174	24	18810.09521
	17	477.0768	778.7402954	3.424081	14.86325	2.34072828	2.28777051	0.005650073	4.400512218	105.6123	7.02234602	6.863685608	0.027846025	21.6859207	520.4620972	24	18689.76709
	18	483.9172	789.9064941	3.418612	14.87289	2.44343328	2.391973734	0.005907424	4.66625452	111.9901	7.215671539	7.063413143	0.028656321	22.6364632	543.2750854	24	18957.75586
	19	480.9726	785.0992432	3.419375	14.87154	2.49510288	2.441739559	0.00603033	4.735677719	113.6563	7.095479965	6.944015026	0.028171934	22.1229172	530.9500122	24	18842.38184
	20	475.7171	776.5206909	3.418358	14.87334	2.51306868	2.460020542	0.006075479	4.719850063	113.2764	6.91264534	6.767416477	0.027455449	21.3212414	511.7098083	24	18636.49658
	21	471.4067	769.4846191	3.378654	14.94334	2.43603086	2.411962271	0.005956793	4.58483696	105.4512	6.843413353	6.776896954	0.027493913	21.1549091	486.5628967	24	18467.63086
	22	467.8434	763.668335	3.423126	14.86492	2.48190713	2.42714715	0.005994289	4.580219269	109.9253	6.83728838	6.68535614	0.027122529	20.7165413	497.196991	24	18328.04004
	23	465.4425	759.7490845	3.434954	14.84407	2.41465664	2.351999283	0.005808699	4.414170265	105.9401	6.762565613	6.588779926	0.026730729	20.3084965	487.4039001	24	18233.97803
	24	469.6234	766.5742188	3.432156	14.849	2.3005054	2.243077993	0.005539699	4.247193336	101.9326	6.968291283	6.794765949	0.02756642	21.1338749	507.2130127	24	18397.78125
	25	474.8302	775.0722046	3.434445	14.84495	2.36235094	2.301703453	0.005684483	4.406607151	105.7586	7.012806892	6.833301067	0.02772275	21.4872837	515.6948242	24	18601.73291
	26	471.9402	770.3546143	3.447293	14.82232	2.55663085	2.481770754	0.006129192	4.722002506	113.3281	6.670196056	6.475247383	0.026270133	20.2390919	485.7381897	24	18488.51074
	27	469.4536	766.2962646	3.438199	14.83836	2.60098791	2.531567574	0.006252179	4.791408539	114.9938	6.589113235	6.413208008	0.026018441	19.943409	478.6417847	24	18391.11035
	28	463.7448	756.9776001	3.425463	14.8608	2.44287038	2.388430357	0.005898677	4.463145256	98.18919	6.869346142	6.7066679	0.027209001	20.6066132	453.3454895	24	18167.4624
	29	465.8821	760.4665527	3.420075	14.87031	2.42149282	2.370108366	0.005853424	4.451144218	106.8275	6.786095142	6.641422272	0.0269443	20.494175	491.860199	24	18251.19727
	30	471.4529	769.56073	3.445828	14.82492	2.41672301	2.346857071	0.005796	4.461107254	107.0666	6.828544617	6.683875515	0.026905563	20.7107964	497.0591125	24	18469.45752
	31	467.6261	763.31427	3.443222	14.82949	2.47379971	2.403936148	0.00593697	4.532877445	108.7891	6.557634354	6.373572826	0.025857626	19.7372246	473.6934204	24	18319.54248
Jun03	01	465.5632	759.9462891	3.443667	14.82871	2.41735911	2.348926783	0.00580111	4.409361362	105.8247	6.63696909	6.450017452	0.026167767	19.8861008	477.2664185	24	18238.71094
	02	463.426	756.4574585	3.44195	14.83174	2.50782084	2.438220024	0.006021639	4.556026459	109.3446	6.577985287	6.395845413	0.025947984	19.6294117	471.105896	24	18154.979
	03	461.2097	752.8386841	3.454225	14.81009	2.44073009	2.36453867	0.005839668	4.396638993	105.5193	6.559859753	6.355565548	0.025784574	19.4123783	465.8970947	24	18068.12842
	04	465.7658	760.2781372	3.465417	14.79036	2.14311123	2.073616266	0.005121179	3.88721323	93.29312	7.249694824	6.99119854	0.028363345	21.5890865	518.1381226	24	18246.67529
	05	462.339	754.6816406	3.46529	14.79059	2.19128299	2.12003088	0.005235808	3.946709633	94.72103	7.031090736	6.781870365	0.02751408	20.7807884	498.7388916	24	18112.35938
	06	463.3814	756.3858032	3.44761	14.82175	2.42149282	2.350346565	0.005804616	4.390402794	105.3697	6.517729759	6.326637745	0.02566722	19.4180832	466.0339966	24	18153.25928
	07	461.4241	753.1883545	3.440169	14.83487	2.42387843	2.357822418	0.00582308	4.386093616	105.2663	6.414390087	6.23969841	0.025314491	19.0700912	457.6821899	24	18076.52051
	08	458.838	748.9684448	3.436736	14.84093	2.46871305	2.403707027	0.0059364	4.446845055	106.7243	6.32074976	6.155024052	0.024970975	18.7029953	448.8718872	24	17975.24268
	09	465.6184	760.0359497	3.459503	14.80078	2.30161929	2.231896639	0.005512082	4.181665421	100.36	7.110742092	6.868959427	0.027867405	21.2081661	508.9960022	24	18240.86279
	10	474.1923	774.0318604	3.451935	14.81412	2.65488458	2.573679209	0.006356176	4.920333385	118.088	6.732995033	6.528475285	0.026486075	20.5044537	492.1069031	24	18576.76465
	11	476.2249	777.3500977	3.388949	14.92519	2.74979639	2.715061903	0.006705352	5.208586693	114.5889	6.729611874	6.645565987	0.026961109	20.942255	460.7296143	24	18656.40234
	12	411.4995	671.5546875	2.963664	13.6845	6.54846668	20.1799736	0.049838137	6.383857727	134.061	6.850566387	7.026310444	0.02850581	20.4632244	429.7277222	22.55	15143.55769
	13	473.3708	772.690979	3.435401	14.84328	2.7520225	2.680652618	0.006620373	5.116331577	122.792	6.677191257	6.50535059	0.026392255	20.3938503	489.4523926	24	18544.5835
	14	471.4779	769.6012573	3.452063	14.81392	2.82340717	2.736849308	0.006759159	5.203621864	124.8869	6.532514572	6.332802296	0.025692221	19.7737713	474.5704956	24	18470.43018
	15	472.3156	770.9689941	3.438645	14.83756	2.88461542	2.806996346	0.0069324	5.34573698	128.2977	6.620115757	6.443325996	0.02614063	20.1539745	483.6954041	24	18503.25586
	16	469.2992	766.0452271	3.459694	14.80045	2.71116376	2.628334999	0.006491163	4.971743107	119.3218	6.786414623	6.559587479	0.026612291	20.3993244	489.5838013	24	18385.08545
	17	465.5637	759.9464722	3.482207	14.76077	2.57348251	2.4793787	0.006123289	4.646598339	111.5184	6.929022312	6.650047302	0.026979292	20.5233536	492.5604858	24	18238.71533
	18	466.5497	761.5562744	3.427364	14.85746	2.58948469	2.530667067	0.006249952	4.756842136	109.4074	6.872775555	6.707657337	0.027213022	20.7376445	476.9703979	24	18277.35059
	19	471.6538	769.8883057	3.416069	14.87736	2.59303784	2.541632891	0.006277037	4.834217548	116.0212	6.905651569	6.766124725	0.027450204	21.1342049	507.2208862	24	18477.31934
	20	475.4308	776.0542603	3.446501	14.8202	2.69605923	2.616004229	0.00646071	5.015184402	120.3644	6.928705215	6.724381924	0.02728085	21.1751328	508.2032166	24	18625.30225
	21	475.6048	776.336792	3.444495	14.82725	2.69939804	2.622490883	0.006476728	5.02903986	120.697	6.924889565	6.728163719	0.0272962	21.1921158	508.6108093	24	18632.08301
	22	328.2831	676.8778687	2.991131	13.70267	4.49983358	10.78844357	0.02664401	7.910707951	150.3035	6.541594505	7.439868927	0.030183578	20.0247154	380.4696045	18.46111	12495.91751
	23	481.9862	786.7540894	3.446848	14.8231	2.80671334	2.725637436	0.006731471	5.298943996	127.1747	7.323781013	7.110769272	0.02884843	22.6970119	544.7283325	24	18882.09814
	24	482.5714	787.7092285	3.469043	14.78397	2.66235542	2.567959547	0.006342053	4.996322632	119.9117	7.251919746	6.997658253	0.028389545	22.3721962	536.9326782	24	18905.02148
	25	475.9315	776.8705444	3.473304	14.77645	2.86680913	2.761863708	0.006820938	5.30059433	127.2143	6.955731487	6.605367184	0.026798025	20.8212051	499.7088928	24	18644.89307
	26	471.9754	770.4130249	3.471522	14.7796	2.80877924	2.708137989	0.00668825	5.154248714	123.702	6.718369007	6.476878643	0.026276737	20.2447414	485.8738098	24	18489.9126
	27	471.7964	770.121521	3.498868	14.73139	2.45583415	2.354775906	0.005815559	4.471689701	107.3205	7.356372356	7.026160717	0.028505171	21.9802799	527.5266724	24	18482.9165
	28	468.1733	764.206604	3.445831	14.82489	2.76140285	2.681548834	0.006622585	5.061824322	121.4838	6.619798183	6.429206848	0.026083337	19.9341717	478.420105	24	18340.9585
	29	471.816	770.1529541	3.455625	14.80763	2.82404304	2.735221624	0.006755141	5.203484058	124.8836	6.791183472	6.577433109	0.026684683	20.551466	493.235199	24	18483.6709
	30	474.7169	774.8884277	3.479726	14.76514	2.88652301	2.7760849	0.006856059	5.313746452	127.5299	6.820595264	6.559785843	0.026613109	20.622612	494.942688	24	18597.32227
Jul03	01	477.8185	779.9512329	3.469489	14.78318	3.23469925	3.119338036	0.007703786	6.008385181	144.2012	6.759385109	6.52085638	0.026455162	20.6366158	495.2768066	24	18718.82959
	02	473.8622	773.4937134	3.462493	14.79552	3.25997758	3.150891781	0.007781714	6.023397923	144.5616	6.682754993	6.459144592	0.026204791	20.2705498	486.4931946	24	18563.84912
	03	473.9178	773.5834351	3.460902	14.79832	3.21244121	3.105905771	0.007670611	5.934934139	142.4384	6.628223896	6.409967422	0.026005279	20.1189842	482.8555908	24	18566.00244
	04	472.2278	770.8255615	3.471523	14.7796	2.91609502	2.811589956	0.006943744	5.353688717	128.4885	6.680529594	6.440140247	0.026127683	20.1401539	483.3637085	24	18499.81348
	05	472.2338	770.8344116	3.466943	14.78767	2.74772882	2.652539492	0.006550943	5.050596237	121.2143	6.852233887	6.614699364	0.026835889	20.6868668	496.4848022	24	18500.02588
	06	473.0605	772.1842651	3.465354	14.79047	2.60957122	2.52031827	0.006224395	4.807563809	115.382	6.911535263	6.675328732	0.027081858	20.9145241	501.9486084	24	18532.42236
	07	471.8568	770.2201538	3.468661	14.78465	3.02960625	2.922129631	0.007216744	5.559002399	133.4161	6.560814857	6.330422878	0.02568257	19.7819538	474.7669067	24	18485.28369
	08	477.4505	779.3504028	3.456833	14.8055	3.34662366	3.239811182	0.008001317	6.237355232	149.6965	6.675920486	6.463174343	0.026221151	20.4388382	490.4841003	24	18704.40967

	09	472.3492	771.0228882	3.447603	14.82177	3.46276617	3.360921383	0.008300424	6.399918556	147.1981	6.47711277	6.287533283	0.02550857	19.663969	452.2713013	24	18504.54932	
	10	471.7201	769.9959717	3.484241	14.75717	3.05536532	2.946215391	0.007276226	5.58894062	134.1346	6.931249142	6.645281315	0.02695995	20.7855663	498.8536072	24	18479.90332	
	11	469.3491	766.1259766	3.489966	14.74708	3.01387072	2.896165371	0.00715262	5.478287697	131.4789	6.712803841	6.430305481	0.026087787	19.9996376	479.9913025	24	18387.02344	
	12	466.3627	761.2513428	3.487105	14.75212	3.07444239	2.950291157	0.007286291	5.547684193	133.1444	6.339508057	6.084307194	0.024684059	18.790863	450.9807129	24	18270.03223	
	13	467.239	762.6819458	3.479917	14.7648	3.02293205	2.907088757	0.007179596	5.47687912	131.4451	6.383229256	6.138615131	0.024904408	18.9937286	455.8494873	24	18304.3667	
	14	466.8654	762.0720215	3.500522	14.72847	2.57316422	2.466995001	0.006092706	4.637991905	111.3118	6.983396053	6.66613245	0.027044555	20.6263866	495.0332947	24	18289.72852	
	15	462.6817	755.2423096	3.497597	14.73365	2.71211672	2.598488808	0.00641745	4.844135264	116.2593	6.760499477	6.463116646	0.026220912	19.8156548	475.5756836	24	18125.81543	
	16	464.0992	757.5561523	3.498424	14.73217	2.58906388	2.481315374	0.006128072	4.634848118	111.2364	6.970200062	6.659235954	0.027016561	20.488863	491.7326965	24	18181.34766	
	17	462.2749	754.5787354	3.497978	14.73296	2.99622297	2.872014284	0.007092972	5.343626976	128.2471	6.811215878	6.508000851	0.026403001	19.940979	478.5834961	24	18109.88965	
	18	462.5797	755.0764771	3.489837	14.74731	3.14487171	3.017710447	0.007452796	5.619437695	134.8665	6.636332512	6.359445572	0.025800312	19.4979839	467.9515991	24	18121.83545	
	19	341.6898	669.2946167	3.056496	13.68255	6.02188969	12.60954857	0.031141568	7.799708366	155.9942	6.864990575	7.045368671	0.02858308	19.9107437	398.2148743	19.36111	12958.28716	
	20	468.5024	764.7446289	3.457788	14.80382	3.08652616	2.987849951	0.007379054	5.64195919	135.407	6.570512772	6.358877659	0.025798012	19.7314835	473.555603	24	18353.87109	
	21	470.6076	768.1798096	3.476547	14.77075	2.82229376	2.72177887	0.00672194	5.158845901	123.8123	7.169883251	6.894164562	0.027969675	21.5023422	516.0562134	24	18436.31543	
	22	465.4341	759.7357178	3.460395	14.79922	3.11927629	3.018241644	0.007454113	5.657577991	135.7819	6.621228218	6.401806355	0.025972188	19.7487831	473.9707947	24	18233.65723	
	23	468.2773	764.3770752	3.455349	14.80813	2.91010666	2.821573734	0.006968402	5.312334061	127.496	7.067763805	6.840017319	0.027749991	21.2523785	510.0570984	24	18345.0498	
	24	467.6758	763.3948364	3.476675	14.77052	2.7801621	2.680275917	0.006619439	5.049953938	121.1989	7.047464848	6.777754307	0.027497396	21.0030289	504.0726929	24	18321.47607	
	25	469.0492	765.637207	3.486022	14.75403	2.85885954	2.745819092	0.006781311	5.189223766	124.5414	6.889117241	6.610984325	0.026820805	20.5445957	493.0703125	24	18375.29297	
	26	466.8682	762.0764771	3.484495	14.75672	3.15743303	3.032654285	0.0074897	5.705642223	136.9364	6.451910019	6.196456909	0.025139067	19.171463	460.1151123	24	18289.83545	
	27	463.8656	757.1749878	3.470186	14.78196	3.27476335	3.157999893	0.007797787	5.904809952	141.7154	6.268443108	6.046478271	0.024530608	18.5740509	445.7771912	24	18172.19971	
	28	464.5108	758.2288208	3.459312	14.80113	3.17587495	3.072106361	0.007587139	5.753306866	138.0794	6.321066856	6.115350246	0.024810016	18.8122826	451.494812	24	18197.4917	
	29	465.5054	759.8522949	3.465228	14.7907	3.07507873	2.97303462	0.007342461	5.570823669	133.6998	6.722500801	6.488744736	0.026324892	20.0240955	480.5783081	24	18236.45508	
	30	466.0027	760.6639404	3.495308	14.73767	3.34121823	3.206442595	0.007918908	6.006531239	144.1568	6.643010139	6.351686001	0.025768837	19.6352119	471.2451172	24	18255.93457	
	31	469.6817	766.6685181	3.491555	14.74428	3.38001156	3.247137547	0.008019412	6.137987614	147.3117	6.676555157	6.392400742	0.02593402	19.9043331	477.70401	24	18400.04443	
Aug03	01	466.308	761.1617432	3.513685	14.70527	3.31530595	3.166896582	0.007821241	5.940773964	142.5786	6.522500038	6.202788353	0.025164749	19.1792831	460.3027954	24	18267.88184	
	02	466.9567	762.2200928	3.482462	14.76033	3.52611804	3.388637543	0.008368874	6.380851269	153.1404	6.100395679	5.863247395	0.023787245	18.1363964	435.2734985	24	18293.28223	
	03	465.5108	759.8612671	3.491173	14.74495	3.39988494	3.258398771	0.008047222	6.115234852	146.7656	6.063510418	5.81275177	0.023582378	17.9201126	430.0827026	24	18236.67041	
	04	471.1097	769.0004272	3.521127	14.69215	2.48302031	2.370089054	0.005853377	4.485389709	107.6494	7.253351212	6.879725933	0.027911087	21.5126953	516.3046875	24	18456.01025	
	05	470.5797	768.1349487	3.490602	14.74597	2.86442423	2.745957136	0.006781651	5.210358143	125.0486	6.47957325	6.213602543	0.02520862	19.3675175	464.8204041	24	18435.23877	
	06	468.7688	765.1796265	3.47979	14.76503	2.92388368	2.811644077	0.006943879	5.314144611	127.5395	6.38418293	6.139930248	0.024909733	19.0611458	457.4674988	24	18364.31104	
	07	469.7915	766.8479004	3.500268	14.72892	2.60098624	2.49323678	0.006157513	4.71694231	113.2066	6.864157677	6.5541749	0.026590325	20.4090462	489.8171082	24	18404.34961	
	08	470.1371	767.4130859	3.497978	14.73296	2.63198876	2.522879601	0.006230721	4.774234295	114.5816	6.813282967	6.510896683	0.026414737	20.2905045	486.9721069	24	18417.91406	
	09	465.5391	759.906189	3.483734	14.75807	2.89542675	2.781305313	0.006868953	5.22078228	125.2988	6.293719769	6.046382904	0.024530225	18.6413536	447.3924866	24	18237.74854	
	10	465.2363	759.4127197	3.489329	14.74821	2.89733505	2.778497458	0.006862017	5.21164608	125.0795	6.295470238	6.038131714	0.024496751	18.6041374	446.4992981	24	18225.90527	
	11	469.539	766.4353027	3.474385	14.77455	3.23167872	3.112257957	0.007686301	5.892706871	141.425	6.315660477	6.083641052	0.024681371	18.9161243	453.9869995	24	18394.44727	
	12	467.9149	763.7850342	3.486278	14.75359	2.84200716	2.729707956	0.006741523	5.151470184	123.6353	6.496108055	6.23692131	0.025303237	19.3291416	463.8993835	24	18330.84082	
	13	468.8296	765.2784424	3.493463	14.74093	2.64518428	2.537550926	0.006266954	4.790774345	114.9786	6.818051815	6.525451183	0.026473603	20.2742214	486.5812988	24	18366.68262	
	14	465.7284	760.2154541	3.466118	14.78914	2.91084743	2.810371637	0.006940736	5.277518272	126.6604	6.397537231	6.177302361	0.025061354	19.0529003	457.2695923	24	18245.1709	
	15	467.5556	763.1975708	3.470377	14.78162	2.80830288	2.707988739	0.006687884	5.104737282	122.5137	6.492928028	6.261827946	0.025404274	19.3890419	465.3370056	24	18316.7417	
	16	311.8958	678.8165283	2.921887	13.82363	5.08362198	17.11660984	0.042273141	7.738144875	139.2866	6.026082993	7.299360752	0.029613556	18.7238293	337.0289307	17.89167	12145.15888	
	17	467.4117	762.9644775	3.453526	14.81133	3.12277365	3.02569747	0.007472523	5.702477455	136.8595	6.86399889	6.651846886	0.026986584	20.5902786	494.166687	24	18311.14746	
	18	465.5304	759.8925781	3.453272	14.81177	3.12468195	3.027866364	0.007477879	5.683705807	136.4089	6.784346104	6.57470417	0.02667363	20.2715454	486.5170898	24	18237.42188	
	19	467.2418	762.6865234	3.480109	14.76447	2.76076627	2.658183336	0.006564879	5.000477314	120.0115	7.217738152	6.936573505	0.02814173	21.4790802	515.4979248	24	18304.47656	
	20	469.0548	765.6461182	3.495534	14.7549	2.39266419	2.29757452	0.00567429	4.341232777	104.1696	7.665650845	7.359621525	0.029858029	22.8674622	548.8190918	24	18375.50684	
	21	468.1787	760.9509888	3.508027	14.71525	2.27809	2.178030491	0.005379054	4.083292007	97.99901	7.612814426	7.257279873	0.02944283	22.4263458	538.2322998	24	18262.62373	
	22	464.4229	758.0854492	3.494035	14.73991	3.03056288	2.902492046	0.007168247	5.435391903	130.4494	6.516934395	6.243922234	0.025331637	19.2075291	460.9807129	24	18194.05078	
	23	462.9558	755.6906738	3.492953	14.74182	3.01975203	2.893378019	0.007145734	5.401079655	129.6259	6.451751232	6.181893349	0.025079935	19.0546413	454.9114075	24	18136.57617	
	24	461.1839	752.7984009	3.500712	14.72813	3.20544624	3.064301729	0.007567864	5.698213577	136.7571	6.300557613	6.02359532	0.024437726	18.3976116	441.5426941	24	18067.16162	
	25	462.4918	754.9328613	3.505926	14.71895	2.84248447	2.721018314	0.00672006	5.058597088	121.4063	6.844443321	6.525103569	0.026472395	20.013567	480.325592	24	18118.38867	
	26	461.4095	753.1660767	3.409508	14.88894	3.08869314	3.036097288	0.007498206	5.641163853	124.106	6.723311424	6.602898121	0.026788009	20.2080269	444.5765991	24	18075.98584	
	27	465.1679	759.3007202	3.434066	14.84564	3.54153872	3.460274935	0.008545794	6.480273724	155.5266	6.590703487	6.417106628	0.026034245	19.7817631	474.7622986	24	18223.21729	
	28	468.0254	763.9643555	3.454353	14.80986	3.83041501	3.710607052	0.009164036	7.001864433	168.0447	6.439669655	6.239049911	0.025311863	19.3370285	464.0887146	24	18335.14453	
	29	470.517	768.0317993	3.460266	14.79945	3.71101665	3.588874102	0.008863393	6.80877018	163.4105	6.543803215	6.328953266	0.025676617	19.7198372	473.2760925	24	18432.76318	
	30	468.538	764.8029785	3.45467	14.80931	3.6900301	3.57459712	0.008828131	6.752390385	162.0574	6.479574203	6.277516365	0.025467934	19.4819088	467.5657959	24	18355.27148	
	31	464.7281	758.5831909	3.450727	14.81626	3.66109705	3.550420046	0.008768424	6.652860165	159.6686	6.39547205	6.2026577	0.025164224	19.0896759	458.1521912	24	18205.99658	
Sep03	01	462.8406	755.5023193	3.445704	14.82514	3.60258961	3.498717546	0.008640734	6.529163837	156.6999	6.377505302	6.194485188	0.025131071	18.9871082	455.6906128	24	18132.05566	
	02	461.8598	753.9014893	3.472986	14.77702	3.16570044	3.055299282	0.007545631	5.681350231	136.3524	6.775284767	6.523138046	0.026464429	19.956383	479.1932068	24	18093.63574	
	03	459.7225	750.4127197	3.469361	14.78342	3.14916539	3.043919563	0.007517526	5.629294395	135.1031	6.701198101	6.457588673	0.026198486	19.6803455	472.3283081	24	18009.90527	
	04	460.7993	752.1705322	3.439706	14.83569	3.14413357	3.063123465	0.007564955	5.681556225	130.6758	6.722364902	6.536962032	0.026520509	19.9581356	459.0371094	24	18052.09277	
	05	463.8159	757.0944214	3.455243	14.8083	3.22436428	3.13117218	0.007733011	5.850385666	140.4093	6.713439465	6.496273994	0.026355429	19.9657841	479.1788025	24	18170.26611	
	06	461.8542	753.8924561	3.471841	14.77904	3.7520349	3.616462469	0.008931528	6.733931541	161.6144	6.225040913	6.000708103	0.024344908	18.3541546	440.4996948	24	18093.41895	
	07	462.9645	755.7041626	3.476583	14.76715	3.23104286	3.108188868	0.007676249	5.802805424	139.2673	6.40230751	6.159687519	0.024989896	18.886301	453.2712097	24	18136.8999	
	08	467.269	762.7313232	3.467071	14.78745	3.06685254	2.959899664	0.007310024	5.577670574	133.8641	6.70024395	6.467679501	0.026239425	20.0143757	480.3450012	24	18305.55176	
	09	471.7939	770.1170654	3.470887	14.78072	2.88175416	2.778326273	0.006861594	5.284831524	126.836	6.942219734	6.693819523	0.027156684	20.9141083	501.9385986	24	18482.80957	

	10	466.3872	761.291748	3.398527	14.9083	2.8860085	2.845563412	0.007027645	5.344395161	112.2323	6.811927319	6.704781532	0.027201347	20.7156715	435.0290833	23.93889	18224.47831
	11	463.2503	756.1705322	3.382046	14.9735	3.2447679	3.211399078	0.007931148	5.997992039	143.9518	6.42498827	6.359091282	0.025798883	19.5078583	468.1885986	24	18148.09277
	12	464.1872	757.6998291	3.371378	14.95617	2.77479219	2.755602598	0.006805476	5.149534225	118.4393	7.063393116	7.010791779	0.028442826	21.5659256	496.0162964	24	18184.7959
	13	460.3874	751.4979858	3.416959	14.8758	2.9383533	2.878275394	0.007108437	5.342298985	128.2152	6.650165081	6.519449711	0.026449449	19.8818665	477.1647949	24	18035.95166
	14	352.8957	658.3283691	3.003155	14.11249	3.25273252	4.094461918	0.010112029	5.837379932	122.585	6.535262108	8.940812111	0.036272932	19.5085087	409.6787109	20.25	13331.14948
	15	467.5359	763.1662598	3.432455	14.84848	3.26040244	3.178923368	0.007850943	5.991938114	143.8085	6.968822479	6.795179367	0.0275681	21.0392132	504.9411011	24	18315.99023
	16	471.0055	768.8299561	3.430822	14.85135	3.08859253	3.034082413	0.007493232	5.765775204	138.3786	7.099135876	6.9233675	0.028098158	21.5932999	518.2391968	24	18451.91895
	17	476.8849	778.4266357	2.649966	16.22803	2.60607505	3.97506237	0.009817168	7.657258987	168.4597	5.470513821	6.947962284	0.028187936	21.9170856	482.1759033	24	18682.23926
	18	472.7639	771.6999512	3.484495	14.75673	3.07078624	2.948877811	0.007282804	5.622011185	134.9283	7.053507328	6.775184155	0.027486971	21.2142963	509.1430969	24	18520.79883
	19	470.4154	767.8658447	3.473303	14.77647	3.08716202	2.974312067	0.007345617	5.641861439	135.4047	6.992139816	6.73707819	0.027332371	20.9893742	503.7449951	24	18428.78027
	20	469.8516	766.9465332	3.465672	14.78992	3.03596878	2.931589127	0.007240104	5.553251743	133.278	6.972267628	6.733105659	0.027316259	20.953867	502.8927917	24	18406.7168
	21	466.6648	761.7446899	3.461475	14.7973	3.03278923	2.931996584	0.007241115	5.516160965	132.3879	6.936018467	6.705565929	0.027204528	20.7261543	497.4277039	24	18281.87256
	22	465.9233	760.5339355	3.37963	14.94161	2.98758459	2.961055517	0.007312876	5.559756756	133.4342	6.936547279	6.868151665	0.027864134	21.1921425	508.6113892	24	18252.81445
	23	467.0877	762.4352417	3.403032	14.90036	3.16506338	3.112169504	0.00768608	5.859995365	140.6399	6.926002026	6.812129974	0.027636854	21.074213	505.7810974	24	18298.4458
	24	469.1617	765.8209229	3.45715	14.80494	3.61244678	3.496682167	0.008635705	6.613645554	158.7275	6.71789217	6.503101826	0.026383134	20.2085915	485.0061951	24	18379.70215
	25	469.6898	766.6818848	3.465291	14.79059	3.70990372	3.582596302	0.008847886	6.784358978	162.8246	6.588319778	6.362543106	0.025812875	19.7907867	474.9789124	24	18400.36523
	26	469.8545	766.9511108	3.480617	14.76356	3.46761131	3.341555357	0.008252595	6.323933601	151.7744	6.919007301	6.64574194	0.02696182	20.6903629	496.5686951	24	18406.82666
	27	465.5547	759.9329834	3.455688	14.80752	3.76872802	3.648873329	0.009011573	6.851009369	164.4242	6.438395977	6.23490572	0.025295062	19.2243118	461.3834839	24	18238.3916
	28	461.8878	753.9464111	3.459249	14.80125	3.31657672	3.208229065	0.007923318	5.979179859	143.5003	6.50628376	6.294307709	0.025536049	19.2544174	462.1060181	24	18094.71387
	29	463.7859	757.045105	3.475785	14.77208	2.81498003	2.710276365	0.006693533	5.068154335	121.6357	6.7506423	6.499903679	0.026370158	19.9633331	479.1199951	24	18169.08252
	30	468.2196	764.2828979	3.488057	14.75044	2.74836493	2.642436743	0.006525987	4.981771469	119.5625	7.195640087	6.897139549	0.027981738	21.3994007	513.5856323	24	18342.78955
Oct03	01	467.9922	763.9106445	3.457023	14.80516	3.08636594	2.987455845	0.007378078	5.636497498	135.2759	6.760340214	6.544455528	0.026550896	20.2827168	486.7851868	24	18333.65547
	02	469.3656	766.15271	3.463446	14.79384	2.86108637	2.765059948	0.006828831	5.232460976	125.5791	6.965747833	6.730835915	0.027307041	20.921217	502.1091919	24	18387.66504
	03	469.2881	766.0272217	3.489138	14.74855	2.77173662	2.658707857	0.006566179	5.031284332	120.7508	7.014080524	6.727926731	0.027295234	20.9127121	501.9050903	24	18384.65332
	04	466.0133	760.6818848	3.49448	14.73912	2.72849298	2.612804651	0.006452809	4.910347939	117.8484	6.874173641	6.583154202	0.026707901	20.3182507	487.6380005	24	18256.36523
	05	464.4976	758.2064209	3.50262	14.72478	2.66187787	2.542967558	0.006280331	4.762424946	114.2982	6.839514256	6.534691811	0.026511284	20.1014423	482.4346008	24	18196.9541
	06	464.036	757.453064	3.484115	14.7574	2.70305586	2.595907211	0.006411073	4.857269764	116.5745	6.825365067	6.55592823	0.026597453	20.1466503	483.5195923	24	18178.87354
	07	462.821	755.4710693	3.475466	14.77265	2.59971499	2.503066301	0.006181788	4.671090126	112.1062	6.843966484	6.590681553	0.026738442	20.200613	484.8146973	24	18131.30566
	08	464.184	757.6953125	3.478836	14.76671	2.67862511	2.576674223	0.006363578	4.82187891	115.7251	6.873961449	6.612499237	0.026826959	20.3273907	487.8573914	24	18184.6875
	09	465.239	759.4172363	3.483987	14.75762	2.57475376	2.473024607	0.006107596	4.638315678	111.3196	6.949373722	6.675178528	0.027081255	20.5672283	493.6134949	24	18226.01367
	10	476.0442	777.0543213	3.48208	14.76098	2.54454708	2.445298672	0.006039122	4.693481445	112.6436	7.306770802	7.022376537	0.02848983	22.1388035	531.3312988	24	18649.30371
	11	475.8544	776.744873	3.492128	14.74328	2.65822291	2.547152042	0.00629067	4.887050629	117.2892	7.193573952	6.894001484	0.027969021	21.7306252	521.5349731	24	18641.87695
	12	473.9917	773.7045288	3.487041	14.75225	2.72992373	2.619815111	0.006470118	5.007188797	120.1725	7.062729836	6.778283119	0.027499538	21.2777462	510.6658936	24	18568.90869
	13	475.9315	776.8705444	3.47553	14.77254	2.7405746	2.638729572	0.006516836	5.063302994	121.5193	7.145560265	6.880378723	0.027913742	21.6859798	520.463501	24	18644.89307
	14	476.5548	777.8884277	3.471588	14.77949	3.01577711	2.907049894	0.007179501	5.583888054	134.0133	7.092458725	6.836897373	0.027737342	21.5810871	517.946106	24	18669.32227
	15	475.3319	775.8929443	3.388875	14.92531	3.21624351	3.175951242	0.007843606	6.082071781	139.8876	6.910269737	6.823506355	0.027683012	21.4638386	493.6683044	24	18621.43066
	16	478.1455	780.4848633	3.432159	14.849	3.44710255	3.361847878	0.008302708	6.481282711	155.5508	6.873060226	6.702636242	0.02719265	21.2244415	509.3865967	24	18731.63672
	17	476.0302	777.0319824	3.435464	14.84316	3.47524285	3.384747505	0.008359265	6.49772644	155.9454	6.827750206	6.650732517	0.026982071	20.9685249	503.2445984	24	18648.76758
	18	469.5878	766.5159912	3.435847	14.8425	2.959337	2.881510019	0.007116427	5.46086359	131.0607	6.829656601	6.651928425	0.026986925	20.6899662	496.5592041	24	18396.38379
	19	468.3766	764.5383301	3.468024	14.78577	2.85552049	2.754947424	0.006803857	5.20331049	124.8794	6.690863609	6.456605434	0.026194492	20.0279617	480.6711121	24	18348.91992
	20	467.0084	762.3053589	3.46103	14.7981	2.90639639	2.809977531	0.006939761	5.29197979	127.0075	6.674011707	6.452913284	0.026179513	19.9598198	479.0357056	24	18295.32861
	21	466.7285	761.8479004	3.435525	14.84306	3.13064051	3.051430464	0.007536074	5.736957073	131.95	6.60004282	6.428431988	0.026080195	19.8600311	456.7807007	24	18284.34961
	22	468.3051	764.421936	3.445513	14.82546	3.45489216	3.355243444	0.008286398	6.335228443	152.0455	6.580369949	6.391003609	0.025928346	19.8217545	475.7221069	24	18346.12646
	23	472.0383	770.5162354	3.468724	14.78453	3.56141281	3.435602427	0.00848486	6.538831234	156.9319	6.63744545	6.403725147	0.025979949	20.0179996	480.4320068	24	18492.38965
	24	469.8932	767.013855	3.474704	14.774	3.40974092	3.283917904	0.008110246	6.22292614	149.3502	6.613279343	6.369614601	0.025841566	19.8237381	475.7697144	24	18408.33252
	25	470.8296	768.5430298	3.461539	14.79722	3.7194438	3.596160412	0.008881387	6.826224804	163.8294	6.495314121	6.279254913	0.025474988	19.5798454	469.9162903	24	18445.03271
	26	375.4365	668.494812	2.948718	13.0898	4.20048867	4.225986481	0.010436863	7.557792664	166.2714	6.134663582	6.604839848	0.026795899	18.8352451	414.3753967	20.75278	13873.12383
	27	478.8405	781.6195679	3.437437	14.8397	4.29353571	4.178965569	0.010320732	8.06962204	193.6709	6.792295933	6.612473965	0.026826859	20.973238	503.3576965	24	18758.86963
	28	478.1353	780.46698	3.431585	14.85	3.99639368	3.896366596	0.009622807	7.512541294	180.301	6.977990627	6.804937704	0.027607271	21.5490627	517.1774902	24	18731.20752
	29	478.1565	780.5029297	3.415983	14.87753	3.63592291	3.560044527	0.008792196	6.863955975	164.7349	7.20305872	7.057149887	0.028630912	22.3485794	536.3659058	24	18732.07031
	30	490.4476	800.5661011	3.458486	14.80259	3.69877529	3.57890749	0.008838777	7.076293945	169.8311	7.548108101	7.303553581	0.029630566	23.72295	569.3508301	24	19213.58643
	31	489.6124	799.2027588	3.449902	14.81772	3.61085749	3.50175786	0.008648243	6.914031506	165.9368	7.578315735	7.352039814	0.029827267	23.8380756	572.1138306	24	19180.86621
Nov03	01	490.7743	801.0996094	3.445958	14.82467	3.93693423	3.822467566	0.009440294	7.565462589	181.5711	7.323622227	7.112447262	0.028855255	23.1154537	554.770874	24	19226.39063
	02	489.7528	799.4315186	3.428723	14.85505	3.83661413	3.744256973	0.009247141	7.393506527	177.4442	7.419331074	7.241654396	0.029379442	23.486845	563.6843262	24	19186.35645
	03	490.6757	800.9382324	3.44138	14.83274	3.79066658	3.68559885	0.009102269	7.291472435	174.9953	7.462098122	7.256724834	0.029440587	23.5808582	565.9406128	24	19222.51758
	04	492.3594	803.6871948	3.435019	14.84395	3.67286038	3.577954054	0.008836428	7.102881908	170.4692	7.515675068	7.322090626	0.02970578	23.8762341	573.0296021	24	19288.49268
	05	490.7473	801.0548096	3.417743	14.87441	3.76528335	3.685804129	0.009102779	7.297895432	175.1495	7.428128719	7.273191452	0.02950738	23.6365051	567.276123	24	19225.31543
	06	487.662	796.0188599	3.437628	14.83935	3.93089294	3.826395273	0.009449995	7.524727821	180.5935	7.255895615	7.064186573	0.02865945	22.813921	547.5341187	24	19104.45264
	07	487.0226	794.973999	3.453207	14.81188	4.12612581	3.998198748	0.009874295	7.853477478	188.4835	7.094844341	6.875775814	0.02789508	22.1766167	532.2388306	24	19079.37598
	08	484.9446	791.5838623	3.451808	14.81435	4.34441185	4.211509228	0.010401104	8.232803345	197.5873	6.86988163	6.660265923	0.027020741	21.393446	513.442688	24	18998.0127
	09	490.3351	784.0588989	3.465673	14.78991	4.00466156	3.867381334	0.009551222	7.49446106	179.8671	6.771468163	6.538675308	0.026527459	20.7983952	499.161499	24	18817.41357
	10	485.4807	792.458313	3.459504	14.8008	4.35633469	4.213929653	0.010407087	8.247897148	197.9495	6.826159954	6.603199005	0.026789233	21.2297459	509.513916	24	19018.99951
	11	484.2828	790.5029907	3.450028	14.81749	4.41500044	4.281678677	0.0105744	8.361387253	200.6733	6.782597542	6.579163551	0.02669172	21.0999126	506.3978882	24	18972.07178

	12	481.9563	786.7047729	3.435761	14.84265	3.99125338	3.887214899	0.009600194	7.554123878	181.299	6.885673523	6.706986904	0.027210291	21.4069633	513.7670898	24	18880.91455	
	13	486.8105	794.6287231	3.447357	14.8222	4.29671669	4.16994524	0.010298465	8.185534477	196.4528	6.943012714	6.740229607	0.027345154	21.7296085	521.5106201	24	19071.08936	
	14	486.052	793.3909912	3.445514	14.82546	4.07413816	3.956189632	0.009770542	7.753723621	186.0894	6.984508514	6.784163952	0.0275234	21.8366451	524.0795288	24	19041.38379	
	15	485.2091	792.0142822	3.444687	14.82691	3.74154162	3.63457036	0.008976248	7.110300541	170.6472	7.051759243	6.850914478	0.027794212	22.0132465	528.3178711	24	19008.34277	
	16	487.9341	796.4627686	3.456007	14.80696	3.9967134	3.86972332	0.009557002	7.812663269	182.7039	7.074492455	6.850458145	0.027792349	22.1357002	531.2567749	24	19115.10645	
	17	489.5163	799.0457764	3.451109	14.81559	4.2277174	4.09984827	0.010125348	8.08976078	194.1543	7.04269743	6.828924656	0.027705004	22.139925	531.3582153	24	19177.09863	
	18	485.9942	793.296814	3.441252	14.83297	4.15919399	4.04458189	0.009988843	7.92317009	190.1561	6.968768597	6.776785851	0.027493462	21.8128204	523.5076904	24	19039.12354	
	19	481.2476	785.5478516	3.430314	14.85225	3.9089005	3.812905788	0.009416682	7.397748947	177.546	6.929977417	6.760590553	0.027427766	21.5482368	517.1577148	24	18853.14844	
	20	479.8463	783.2607422	3.446912	14.82298	3.6727016	3.565347195	0.008805288	6.899189949	165.5806	7.046989441	6.842420101	0.027759729	21.7453175	521.8876343	24	18798.25781	
	21	483.8958	789.8707275	3.459633	14.80057	3.46951962	3.355141163	0.008286146	6.545376301	157.089	7.377835751	7.13691473	0.028954517	22.8727493	548.9459839	24	18956.89746	
	22	493.5386	805.6109619	3.455497	14.80786	3.05886292	2.961433411	0.00731381	5.896604061	141.5185	7.825854778	7.578649998	0.030746637	24.7736702	594.5681152	24	19334.66309	
	23	493.9284	806.2477417	3.443287	14.82938	3.10862541	3.020074129	0.007458633	6.017956257	144.431	7.774661064	7.555692196	0.030653492	24.7178383	593.2280884	24	19349.9458	
	24	489.0463	798.2789307	3.42332	14.86459	3.12197995	3.051713228	0.007536774	6.019571781	144.4697	7.805981636	7.630953312	0.030958842	24.7162666	593.1903687	24	19158.69434	
	25	490.2667	800.2700195	3.430124	14.85259	3.06871915	2.993242025	0.007392369	5.918848515	142.0524	7.927445889	7.733930588	0.031376611	25.1131077	602.7145996	24	19206.48047	
	26	490.9342	801.3596802	3.443033	14.82983	3.39702177	3.301496267	0.008153656	6.534907818	156.8378	7.708047867	7.491117954	0.030991509	24.3606491	584.6555786	24	19232.63232	
	27	485.9836	793.2788086	3.428024	14.85629	3.68319368	3.592762947	0.008872998	7.048921585	169.1741	7.429187775	7.252859592	0.029424908	23.3437214	560.2493286	24	19038.69141	
	28	484.544	790.9290771	3.410028	14.88803	3.6362946	3.56542635	0.008805483	6.976194382	167.4287	7.434117317	7.296448231	0.029601742	23.4089451	561.8146973	24	18982.29785	
	29	484.1732	790.3237305	3.422619	14.86582	3.42786574	3.350853682	0.008275557	6.545048714	157.0812	7.631576061	7.462325096	0.030274704	23.9279461	574.2706909	24	18967.76953	
	30	485.2771	792.1263428	3.434065	14.84563	3.77349782	3.677320004	0.009081827	7.193472385	172.6433	7.558601856	7.365766048	0.029882962	23.6730785	568.1539307	24	19011.03223	
Dec03	01	487.3242	795.4672852	3.449328	14.81873	4.14520454	4.02126503	0.009931253	7.899312496	189.5835	7.428553104	7.207435131	0.029240616	23.2624207	558.2980957	24	19091.21484	
	02	484.2282	790.413269	3.415605	14.87819	4.39433241	4.309258461	0.010642512	8.402334213	176.449	7.135588646	6.990512371	0.028360562	22.3963184	470.3226929	24	18969.91846	
	03	486.4064	793.9693604	3.393321	14.91747	4.31232405	4.252568245	0.010502512	8.340680122	191.8356	7.290338993	7.190143585	0.029170452	23.1643047	532.7789917	24	19055.26465	
	04	482.9722	788.3639526	3.433621	14.84642	4.26825857	4.159116745	0.010271718	8.098527908	194.3647	7.213765144	7.031803608	0.028528079	22.4927883	539.8269043	24	18920.73486	
	05	479.7013	783.0230713	3.451555	14.8148	4.2940135	4.162337303	0.010279656	8.05045414	193.2109	7.211221218	6.992572308	0.028368909	22.2169666	533.2072144	24	18792.55371	
	06	476.7771	778.251709	3.457468	14.80437	4.3639072	4.223204613	0.010429988	8.120071411	194.6817	7.045399666	6.818954945	0.027664538	21.5324669	516.7791748	24	18678.04102	
	07	476.8382	778.3503418	3.464272	14.79238	4.14870167	4.007270336	0.0098967	7.70273304	184.8656	7.025209427	6.786400795	0.027532479	21.4332199	514.3972778	24	18680.4082	
	08	487.8432	796.3149414	3.45238	14.81335	3.79082751	3.673990488	0.009073604	7.228124619	173.475	7.524896145	7.294007778	0.029591842	23.5657005	565.5767822	24	19111.55859	
	09	484.8105	791.3640747	3.455498	14.80786	3.33597136	3.230228424	0.007977653	6.313934803	151.5344	7.60073185	7.361257076	0.029864654	23.6415215	567.3964844	24	18992.73779	
	10	479.344	782.4401245	3.445959	14.82466	3.22722745	3.134240389	0.00774059	6.058113575	145.3947	7.407248497	7.193481445	0.029184004	22.8348331	548.0360107	24	18778.56299	
	11	485.775	792.9381104	3.458549	14.80247	3.30544782	3.198731661	0.007899865	6.26652813	150.3967	7.565597534	7.320334435	0.029698655	23.5507755	565.2186279	24	19030.51465	
	12	489.9807	799.8036499	3.458232	14.80303	3.56427455	3.44925046	0.008518567	6.816897869	163.6055	7.656854153	7.409105301	0.030058792	24.0445576	577.069397	24	19195.2876	
	13	483.9149	789.9020996	3.445068	14.82624	3.19956326	3.10811615	0.007676072	6.06242609	145.4982	7.541113377	7.325127125	0.029718101	23.4786167	563.4868164	24	18957.65039	
	14	481.7029	786.2922974	3.442206	14.83129	2.95329714	2.870878696	0.007090172	5.576070786	133.8257	7.494372368	7.286032677	0.029559491	23.2452049	557.8848877	24	18871.01514	
	15	353.5659	692.5578003	2.995421	14.05148	4.50530624	8.33398056	0.020582331	7.81803894	156.3608	7.37961483	9.836783409	0.039907891	22.887228	457.7445374	19.24722	13329.81435	
	16	494.4999	807.1804199	3.436546	14.84127	3.17428589	3.090839624	0.007633406	6.162801266	147.9072	7.754469872	7.551335812	0.030635824	24.7297001	593.5128174	24	19372.33008	
	17	493.4313	805.4359741	3.427898	14.85651	3.19527173	3.118755102	0.007702347	6.206382751	148.9532	7.787697792	7.602381706	0.030842917	24.6461075	596.3065796	24	19330.46338	
	18	488.4424	797.2924805	3.454161	14.81021	3.17714763	3.077756643	0.007601094	6.061753273	145.4821	7.650018692	7.412214756	0.030071404	23.9814587	575.5549927	24	19135.01953	
	19	483.3709	789.0142822	3.448566	14.82008	3.0475738	2.956167936	0.007300804	5.763216972	138.3172	7.647791862	7.422555923	0.030113362	23.7576046	570.1824951	24	18936.34277	
	20	480.3572	784.0947876	3.468217	14.78543	3.14884758	3.037928343	0.007502731	5.88363266	141.2072	7.367980003	7.109911919	0.028844958	22.6177082	542.8250122	24	18818.2749	
	21	482.555	787.682373	3.470697	14.78107	3.45044041	3.326596975	0.008215646	6.472066879	155.3296	7.26416254	7.004528522	0.028417429	22.3834877	537.2036743	24	18904.37695	
	22	483.0439	788.4807739	3.454797	14.80908	3.32452488	3.220174074	0.007952817	6.270576954	150.4939	7.374973774	7.144389629	0.02898483	22.8542538	548.5020752	24	18923.53857	
	23	481.0249	785.1846313	3.433621	14.84643	3.0534575	2.975799084	0.00734929	5.770731449	138.4975	7.501844406	7.311830997	0.029664138	23.2920494	559.0092163	24	18844.43115	
	24	479.6347	782.9154053	3.42618	14.85954	3.81880879	3.728509903	0.009208254	7.208221436	172.9973	7.275609016	7.107369423	0.028834641	22.5772953	541.8551025	24	18789.96973	
	25	485.1892	791.9829712	3.441442	14.83263	3.77874494	3.674902916	0.00907586	7.183204174	172.3969	7.415832996	7.210701466	0.029253876	23.178854	556.2924805	24	19007.59131	
	26	496.1977	809.9519653	3.44831	14.82052	3.70783782	3.599053383	0.008888533	7.201317787	172.8316	7.797397614	7.567104816	0.030699801	24.8658009	596.7791748	24	19438.84717	
	27	493.9839	806.3375244	3.435339	14.8434	6.24777079	6.075012207	0.015003367	12.01692009	288.4061	7.455580235	7.264163971	0.029470759	23.7800503	570.7211914	24	19352.10059	
	28	494.283	806.8262329	3.411999	14.88454	5.51453543	5.399036884	0.013393932	10.67640018	256.2336	7.500889778	7.357724667	0.029850345	24.1021957	578.4526978	24	19363.82959	
	29	486.1652	793.5747681	3.389995	14.92333	3.75330639	3.702308416	0.009143542	7.262750149	174.306	7.645725727	7.548129559	0.030622821	24.3022575	583.2542114	24	19045.79443	
	30	482.0578	786.8706055	3.395825	14.91305	3.32632756	3.276456118	0.008091818	6.373408794	152.9618	7.589921474	7.480804443	0.030349679	23.8764839	573.0355835	24	18884.89453	
	31	490.0909	799.9830933	3.439662	14.83577	3.8304143	3.726025105	0.009202113	7.363211155	176.7171	7.586900711	7.381711483	0.029947653	23.9588585	575.0125732	24	19199.59424	
Jan04	01	486.3217	793.8303833	3.415496	14.87838	3.64122415	3.567209244	0.008809884	6.995191574	167.8846	7.557330132	7.405026436	0.030042242	23.8490868	572.3781128	24	19051.9292	
	02	485.1293	791.8841553	3.420266	14.86997	3.69400597	3.614127398	0.008925764	7.068074226	169.6338	7.373543262	7.214731216	0.029270209	23.1805496	556.3331909	24	19005.21973	
	03	498.6266	813.9160156	3.43998	14.83523	3.81244922	3.708478212	0.009158775	7.455985069	178.9436	7.758127213	7.547349453	0.030619649	24.9221992	598.1328125	24	19533.98438	
	04	484.555	790.9470215	3.437373	14.8398	5.88226938	5.726760387	0.0141433	11.07082939	265.6999	7.523783684	7.324750423	0.029716568	23.5365715	564.8776855	24	18982.72852	
	05	479.0851	782.0186157	3.420521	14.86953	5.87877083	5.732252121	0.014156858	10.95685577	262.9645	7.485309124	7.325516701	0.029719671	23.2639217	558.3341064	24	18768.44678	
	06	489.5246	799.0592041	3.413652	14.88163	3.76046038	3.686500788	0.0091045	7.277190208	174.6526	7.707411289	7.555654526	0.030653354	24.4980659	587.9536133	24	19177.4209	
	07	484.5773	790.9827881	3.416081	14.87733	3.28912783	3.222904444	0.007959562	6.292174816	144.72	7.608530521	7.453123569	0.030237369	23.9041786	549.7960815	24	18983.58691	
	08	483.2307	788.7855225	3.428914	14.85472	3.8234179	3.728956699	0.009209347	7.261208534	174.269	7.390714169	7.214764595	0.029270338	23.0930786	554.2338867	24	18930.85254	
	09	483.1895	788.7182617	3.435783	14.8426	3.92341948	3.819879532	0.009433904	7.449418068	178.786	7.349537373	7.159044266	0.029044297	22.9047296	549.713501	24	18929.23828	
	10	485.0877	791.8170166	3.444495	14.82725	3.26379251	3.170650005	0.00783051	6.201405525	148.8337	7.602323055	7.386340618	0.029966442	23.7300453	569.5211182	24	19003.6084	
	11	490.4616	800.5884399	3.468216	14.78543	2.8100512	2.711599588	0.006696803	5.363499641	128.724	8.042868614	7.760442734	0.031484164	25.2090797	605.0178833	24	19214.12256	
	12	489.6376	799.2431641	3.476674	14.77052	3.03835297	2.926277399	0.007226984	5.775833607	138.62	7.908049583	7.610948086	0.030877676	24.6821918	592.3726196	24	19181.83594	
	13	490.8272	801.1849365	3.457532	14.80427	3.566818	3.450979471	0.008522834	6.82030344	163.6873	7.721400738	7.473753929	0.030321075	24.2947369	583.0737305	24	19228.43848	

	14	491.8738	802.8934326	3.443605	14.82882	3.25711703	3.165260077	0.007817198	6.276607037	150.6386	7.775615692	7.556399345	0.030656362	24.6142464	590.7418823	24	19269.44238
	15	487.7993	796.2431641	3.457213	14.80482	2.91975045	2.82702589	0.006981867	5.560325623	133.4478	7.792944908	7.543412685	0.030603679	24.3697586	584.8742065	24	19109.83594
	16	486.8739	794.7317505	3.457087	14.80505	2.9281776	2.834567547	0.007000491	5.563715935	133.5292	7.720607281	7.473725796	0.030320957	24.097209	578.3330078	24	19073.56201
	17	487.8596	796.3418579	3.455305	14.80818	3.14964151	3.050400496	0.00753353	6.000213623	144.0051	7.654310226	7.413315296	0.03007588	23.9510994	574.826416	24	19112.20459
	18	490.2993	800.3239136	3.456452	14.80618	3.33645034	3.230079651	0.007977281	6.385629654	153.2551	7.623944283	7.381393909	0.02994637	23.9676952	575.2246704	24	19207.77393
	19	488.8049	797.8842773	3.444495	14.82726	3.31689453	3.222368002	0.007958239	6.34965229	152.3917	7.615198612	7.398756027	0.0300168	23.9502087	574.8049927	24	19149.22266
	20	487.0138	794.9603882	3.449584	14.81827	3.1736505	3.078847408	0.007603788	6.045002937	145.0801	7.674343109	7.446154667	0.030205041	24.0121956	576.2927246	24	19079.04932
	21	490.5905	800.7993164	3.436163	14.84194	3.52118921	3.429517508	0.008469833	6.782754421	162.7861	7.614405632	7.41572237	0.030085629	24.0910969	578.1862793	24	19219.18359
	22	489.9366	799.7319336	3.43025	14.85236	3.93264174	3.831187963	0.009461833	7.549645901	181.1915	7.528711319	7.345324993	0.029800046	23.839941	572.1586304	24	19193.56641
	23	491.2779	801.9202271	3.452571	14.813	3.35838914	3.255427837	0.008039884	6.44732666	154.7358	7.700732708	7.464066029	0.030281762	24.2851582	582.843811	24	19246.08545
	24	488.0577	796.6645508	3.457341	14.8046	3.17619371	3.074009657	0.007591841	6.051492691	145.2358	7.718539238	7.471202374	0.030310716	24.148838	579.5720825	24	19119.94922
	25	488.8487	797.9559937	3.477882	14.7684	3.27539921	3.151794672	0.007783943	6.21163559	149.0793	7.636185646	7.347723961	0.029809771	23.78792	570.9100952	24	19150.94385
	26	488.7552	797.8035889	3.47076	14.78095	3.36220503	3.242114544	0.008007007	6.387779713	153.3067	7.6454072	7.37138176	0.029905742	23.8616047	572.6785278	24	19147.28613
	27	486.9119	794.7945557	3.457088	14.80504	3.49336672	3.381623268	0.00835155	6.638669968	159.3281	7.491668701	7.251971245	0.029421296	23.3855286	561.2526855	24	19075.06934
	28	486.805	794.6196289	3.443542	14.82895	3.48764372	3.389738321	0.008371592	6.653114796	159.6747	7.395642757	7.187246799	0.029158713	23.1705914	556.0941772	24	19070.87109
	29	484.8646	791.4851074	3.433303	14.84699	3.46220636	3.37450695	0.008333976	6.597663879	158.3439	7.466709614	7.278123379	0.029527392	23.3712749	560.9105835	24	18995.64258
	30	482.9725	788.3640137	3.42917	14.85427	3.38652873	3.304528236	0.00816115	6.435003757	154.4401	7.454944611	7.275548935	0.029516954	23.270092	558.4821777	24	18920.73633
	31	487.8678	796.3552246	3.439662	14.83577	2.94550657	2.865885019	0.007077836	5.637308121	135.2954	7.762420177	7.552172184	0.03063922	24.3998337	585.5960083	24	19112.52539
Feb04	01	487.816	796.2700195	3.44227	14.83118	2.88111782	2.800351143	0.006915991	5.509739876	132.2337	7.891834259	7.672380924	0.031126909	24.7853661	594.8488159	24	19110.48047
	02	479.1758	782.166687	3.449456	14.81851	2.3332572	2.264064074	0.005591528	4.374664783	104.992	7.790083885	7.558806419	0.030666133	23.9906502	575.7755737	24	18772.00049
	03	481.7147	786.3101807	3.462938	14.79472	2.33277965	2.254192591	0.005567147	4.377961159	105.0711	7.847476462	7.583683014	0.030767053	24.1925831	580.6220093	24	18871.44434
	04	486.014	793.328186	3.436123	14.84201	2.90684533	2.83130002	0.006992421	5.54886961	127.624	7.648344994	7.449389935	0.03022223	23.9752216	551.4301147	24	19039.87646
	05	488.1434	796.8036499	3.439598	14.83688	3.12547708	3.040699959	0.007509575	5.985851765	143.6604	7.57688427	7.371693134	0.02990702	23.832346	571.9763184	24	19123.2876
	06	480.3603	732.9653931	3.170423	13.72209	3.2685008	2.957383394	0.007303807	5.72502327	131.6755	7.0735116	6.892599106	0.02796392	22.1784191	510.1036377	22.75	16674.96269
	07															0	0
	08	462.8654	788.392395	3.36492	14.96754	4.66485643	8.055830956	0.019895351	8.015439987	184.3551	7.350063324	7.462726116	0.030276317	23.2530079	534.8192139	22.87778	18036.66548
	09	493.8131	806.0593262	3.423763	14.8638	3.52102995	3.441246271	0.008498796	6.852538586	164.4609	7.340315342	7.174761295	0.029108055	23.4647923	563.1550293	24	19345.42383
	10	491.6376	802.5078125	3.406859	14.89361	3.42516208	3.364606142	0.008309525	6.670458317	153.4205	7.274468422	7.145458698	0.028989179	23.2657394	535.1119995	24	19260.1875
	11	489.5831	799.1534424	3.41416	14.88074	3.45489383	3.385119677	0.008360181	6.6829319	160.3904	7.303589821	7.159698963	0.029046938	23.2137375	557.1296997	24	19179.68262
	12	488.3326	797.1130371	3.430315	14.85224	3.75203419	3.659213781	0.009037115	7.204631805	172.9112	7.208836079	7.033189774	0.028533705	22.7446823	545.8723755	24	19130.71289
	13	491.8545	802.8619995	3.432985	14.84755	3.68367124	3.590490341	0.008867385	7.121088028	170.9061	7.244926453	7.062536716	0.02865277	23.0052204	552.1253052	24	19268.68799
	14	486.2057	793.6420898	3.435148	14.84374	2.64852428	2.579534531	0.006370639	5.058590412	121.4062	7.41853714	7.227735043	0.029322967	23.2689037	558.4536743	24	19047.41016
	15	484.7636	791.2877808	3.43839	14.83801	2.87650752	2.798487186	0.006911382	5.470606327	131.2946	7.253828526	7.060735226	0.028645447	22.6659832	543.9835815	24	18990.90674
	16	482.25	787.1846924	3.454162	14.81021	3.04069785	2.944991112	0.007273202	5.726333618	137.432	7.048102379	6.829348564	0.027706716	21.8107338	523.4575806	24	18892.43262
	17	481.6428	786.1934814	3.450409	14.81682	3.21562123	3.118688345	0.007702179	6.052983761	145.2716	6.997068405	6.786485672	0.027532816	21.6493874	519.5853271	24	18868.64355
	18	481.3322	785.6867676	3.42103	14.86862	2.78429675	2.72379756	0.006726925	5.285638809	126.8553	7.037291527	6.883955956	0.027928257	21.9467964	526.7230835	24	18856.48242
	19	482.8876	788.2249146	3.434956	14.84407	2.64629841	2.577912569	0.006366632	5.019135475	120.4593	7.178309441	6.993655205	0.028373308	22.3641548	536.7396851	24	18917.39795
	20	480.9695	785.0949707	3.442333	14.83107	2.47236824	2.403753757	0.005936515	4.660597801	111.8543	7.276404381	7.074117661	0.028699746	22.5322304	540.7734985	24	18842.2793
	21	478.9885	781.8616333	3.440295	14.83476	2.38508582	2.319979906	0.005729623	4.480221272	107.5253	7.287373543	7.088980675	0.028760053	22.4861031	539.6665039	24	18764.6792
	22	476.9557	778.5431519	3.451173	14.81548	2.36394119	2.292217493	0.005661059	4.407299995	105.7752	7.262413979	7.042858601	0.028572921	22.2452583	533.8861694	24	18685.03564
	23	479.088	782.0230713	3.478138	14.76795	2.53119206	2.435252905	0.006014312	4.703727245	112.8895	7.226005554	6.952672005	0.028207034	22.0587254	529.4094238	24	18768.55371
	24	482.3602	787.3640137	3.477183	14.76963	2.85917783	2.751600742	0.006795591	5.350667953	128.416	7.133159637	6.865331173	0.027852692	21.9308376	526.3400879	24	18896.73633
	25	477.0304	778.6641846	3.40374	14.89909	2.67641425	2.632284641	0.006500916	5.061231613	116.4083	7.13522625	7.014874935	0.0284594	22.1612301	509.7082825	24	18687.94043
	26	481.6456	786.1980591	3.430377	14.85214	2.54073215	2.47797823	0.006119829	4.811794281	115.4831	7.248105049	7.072064877	0.028691426	22.5581169	541.3947754	24	18868.75342
	27	486.4176	793.9874268	3.438772	14.83734	2.57666206	2.507277489	0.00619219	4.918095112	118.0343	7.314719677	7.118561745	0.02888005	22.9304371	550.3305054	24	19055.69824
	28	488.4755	797.3461914	3.428787	14.85494	2.79383492	2.726901293	0.006734591	5.370650291	128.8956	7.277994156	7.103402138	0.02881855	22.9783459	551.4802856	24	19136.30859
	29	485.2996	792.1622925	3.425926	14.85998	2.93246961	2.864546776	0.007074531	5.605254173	134.5261	7.196434975	7.029760838	0.028519792	22.5948334	542.276001	24	19011.89502
Mar04	01	479.2637	782.3100586	3.418358	14.87333	2.67348409	2.617105484	0.006463427	5.057514668	121.3803	7.170361519	7.019739151	0.028479138	22.2806664	534.7360229	24	18775.44141
	02	478.201	780.574585	3.43203	14.84923	2.26457667	2.20751214	0.005431379	4.240250587	101.766	7.386209965	7.202613354	0.029128438	22.7385864	545.7260742	24	18733.79004
	03	480.6623	784.5925293	3.407993	14.89161	3.1448729	3.089250803	0.007518831	5.897981644	141.5516	7.064636707	6.936357498	0.027722904	21.7561455	522.147522	24	18830.2207
	04	483.0529	788.4940796	3.410728	14.88679	3.45711827	3.391946793	0.008255555	6.510465145	156.2512	7.052554131	6.919783115	0.027656663	21.8076382	523.3833008	24	18923.85791
	05	483.5052	789.2340698	3.42141	14.86795	3.87747383	3.791610479	0.009228283	7.283191204	174.7966	6.843170643	6.693945885	0.026754059	21.1165676	506.7976074	24	18941.61768
	06	479.0354	781.9378052	3.419248	14.87177	3.7189672	3.640002012	0.00885929	6.929493427	166.3078	6.643805504	6.502812386	0.025990142	20.3258629	487.8207092	24	18766.50732
	07	471.9069	770.3009033	3.423001	14.86515	3.50672245	3.4284513	0.008344402	6.430485725	154.3317	6.484819412	6.340081692	0.025339758	19.5251369	468.603302	24	18487.22168
	08	467.8018	763.6011353	3.420075	14.8703	3.92246628	3.838138342	0.00934153	7.128560543	171.0854	6.32535696	6.189323902	0.024737203	18.8938923	453.4533997	24	18326.42725
	09	468.0385	763.9868774	3.412826	14.88307	4.33789158	4.253037453	0.010351334	7.910278797	189.8467	6.279094219	6.157413483	0.024609666	18.8036366	451.2872925	24	18335.68506
	10	465.2309	759.4038696	3.432794	14.84787	4.09114981	3.987950325	0.00970615	7.372118473	176.9308	6.316931725	6.158821106	0.024615299	18.6946586	448.6766052	24	18225.69287
	11	466.5191	761.506958	3.405639	14.89575	4.08606243	4.014512062	0.009770795	7.441629887	178.5991	6.389271736	6.27809	0.025091976	19.1101494	458.6436157	24	18276.16699
	12	467.33	762.829895	3.429806	14.85314	3.9494946	3.853927135	0.00937996	7.156914234	171.7659	6.510098457	6.352514744	0.025389433	19.3688507	464.852417	24	18307.91748
	13	468.3188	764.4442749	3.43076	14.85147	4.03137064	3.932015419	0.009570006	7.314654827	175.5517	6.464311123	6.30573988	0.025202483	19.269434	462.4664001	24	18346.6626
	14	468.2147	764.2738647	3.424717	14.86213	4.31102467	4.212657452	0.010253052	7.835225105	188.0454	6.33012867	6.185398102	0.024721516	18.6968754	453.5249939	24	18342.57275
	15	465.7442	760.2424316	3.430059	14.8527	4.32406187	4.21822691	0.01026662	7.808214333	187.3491	6.207551479	6.0564785	0.024206258	18.4039593	441.6950073	24	18245.81836
	16	464.3213	757.9194336	3.420774	14.86907	4.3456831	4.250807762	0.010345912	7.842815876	188.2276	6.17845726	6.044294357	0.024157558	18.3106117	439.4647119	24	18190.06641

	17	463.4588	756.5113525	3.404622	14.89755	4.12619242	4.057260513	0.009874836	7.471442699	179.3146	6.262559414	6.155789375	0.024603171	18.6127586	446.7062073	24	18156.27246	
	18	463.6706	756.8566895	3.402842	14.90069	3.88669538	3.821617842	0.009301322	7.041127205	168.987	6.402783871	6.297070026	0.025167838	19.0490131	457.1763	24	18164.56055	
	19	465.228	759.399231	3.419502	14.87131	3.99830198	3.912070751	0.009521473	7.231328964	173.5519	6.392290592	6.256671429	0.025006387	18.9907169	455.7771912	24	18225.58154	
	20	465.0136	759.0494995	3.409964	14.88912	4.37859297	4.296179295	0.010456337	7.938193321	190.5166	6.250795364	6.134432316	0.024517634	18.6109924	446.6637878	24	18217.18799	
	21	464.8165	758.7266846	3.402333	14.90158	4.31500006	4.242788315	0.010326393	7.836912155	188.0859	6.283228874	6.180755615	0.024702966	18.7427635	449.8262939	24	18209.44043	
	22	463.4175	756.4440918	3.40017	14.9054	3.92151117	3.859380484	0.009393228	7.105997086	170.5439	6.365263462	6.265134811	0.025040207	18.9424877	454.6196899	24	18154.6582	
	23	469.6702	766.6505737	3.431459	14.85023	4.07525015	3.9739995	0.009672197	7.416104794	177.9865	6.44666338	6.287410259	0.025129242	19.2660789	462.3858948	24	18399.61377	
	24	478.4911	781.0499878	3.41607	14.87737	4.00720549	3.926269293	0.009556031	7.463185787	179.1165	6.747780323	6.610517502	0.026420612	20.6370506	495.2891846	24	18745.19971	
	25	476.9725	778.5701294	3.419631	14.87109	4.03884315	3.952138901	0.00961899	7.488440514	179.7226	6.689115524	6.546337605	0.0261641	20.3736744	488.9582007	24	18685.68311	
	26	481.9948	786.7675781	3.426053	14.85976	3.8863771	3.795657873	0.009238136	7.269376278	174.465	6.812646866	6.654490948	0.026596362	20.9271793	502.2522888	24	18882.42188	
	27	481.4231	785.8348999	3.41874	14.87266	3.9679356	3.884381294	0.009454081	7.427974701	178.2714	6.78339386	6.639874458	0.026537959	20.8567257	500.5614014	24	18860.0376	
	28	473.8273	773.4354858	3.400934	14.90405	4.13280153	4.066419601	0.009897126	7.652135372	183.6512	6.527586937	6.423023701	0.025671238	19.8611546	476.6676941	24	18562.45166	
	29	468.5796	764.8703613	3.375559	14.94879	3.99400902	3.958165884	0.009633654	7.371397495	176.9135	6.546029568	6.490262508	0.025939984	19.8413296	476.1918945	24	18356.88867	
	30	471.5057	769.6461792	3.417977	14.87401	3.82008076	3.740187407	0.009103125	7.006924629	168.1662	6.616140842	6.478163242	0.025891624	19.9303589	478.3286133	24	18471.5083	
	31	474.0109	773.7359009	3.416578	14.87646	3.92898488	3.848441124	0.009366607	7.247357845	173.9366	6.643964767	6.507688999	0.026009634	20.1255283	483.0126953	24	18569.66162	
Apr04	01	476.159	777.2426758	3.398516	14.90832	3.47365379	3.418720961	0.008320722	6.468151093	155.2356	6.966861725	6.861657619	0.027424367	21.3164215	511.5940857	24	18653.82422	
	02	474.313	774.229248	3.413971	14.88105	3.06998992	3.00671196	0.007317945	5.670912266	136.1019	7.150965691	7.011642933	0.02802382	21.6945038	520.6680908	24	18581.50195	
	03	472.7034	771.6014404	3.437819	14.83903	3.70402217	3.605575323	0.008775503	6.771615982	162.5188	6.756048203	6.576498985	0.026284646	20.2828369	486.7880859	24	18518.43457	
	04	453.0769	771.7199097	3.4267	14.85862	3.06660485	2.994794846	0.007288939	5.625182152	129.3792	6.937644482	6.775127888	0.027078517	20.8980217	480.6545105	24	18521.27783	
	05	475.1872	775.6552734	3.434384	14.84507	3.12293386	3.042980909	0.007406218	5.744496346	137.8679	6.943171501	6.765590191	0.027040409	20.97575	503.4179993	24	18615.72656	
	06	477.0054	778.6239014	3.429106	14.85437	3.19113755	3.114206791	0.007579574	5.901522636	141.6365	6.943013191	6.775852203	0.027081417	21.0879631	506.1111145	24	18686.97363	
	07	475.8955	776.8120117	3.406785	14.89374	3.16712999	3.111049175	0.007571886	5.882388592	141.1773	6.949531078	6.826517582	0.027283913	21.1963158	508.7116089	24	18643.48828	
	08	471.7145	769.9869995	3.425607	14.86054	3.27969241	3.203849077	0.007797754	6.005552292	144.1333	6.779101372	6.622963905	0.026470367	20.3851376	489.2433167	24	18479.68799	
	09	462.9285	755.6459351	3.428343	14.85573	2.67332411	2.608634949	0.006349076	4.79910183	115.1785	6.675124645	6.515862465	0.026042309	19.6793251	472.3038025	24	18135.50244	
	10	367.4366	685.4089355	3.075978	13.73632	4.98502827	10.46833706	0.025478519	7.730245113	162.3351	6.324314117	6.657941341	0.026610143	18.7442932	393.6301575	20.69722	14186.06073	
	11	472.5963	771.4263916	3.421156	14.8684	2.49748826	2.443206549	0.00594645	4.58708334	110.09	7.000724792	6.84833765	0.027371138	21.1152287	506.7655029	24	18514.2334	
	12	475.1264	775.5564575	3.419885	14.87065	2.53310037	2.479465723	0.006034697	4.679638386	112.3113	7.002950191	6.852209091	0.0273866	21.2423992	509.8175964	24	18613.35498	
	13	480.5276	784.3729248	3.458231	14.80303	2.60623288	2.522026777	0.006138282	4.81454134	115.549	7.011535168	6.785185814	0.027118713	21.2722416	510.5338135	24	18824.9502	
	14	484.137	790.2652588	3.440615	14.83408	2.56012917	2.490087986	0.00606055	4.789262295	114.9423	7.104382992	6.909945965	0.027617358	21.8262157	523.8292236	24	18966.36621	
	15	481.4447	785.8707275	3.446784	14.82321	2.53850579	2.464411736	0.005998054	4.715055943	113.1613	7.050009251	6.845227242	0.027358692	21.501545	516.0371094	24	18860.89746	
	16	482.5852	787.7316895	3.448819	14.81962	2.34549928	2.275657892	0.005538655	4.363591671	104.7262	7.231093884	7.016811371	0.028044462	22.0915413	530.1970215	24	18905.56055	
	17	483.5525	789.3102417	3.459949	14.8	2.25789928	2.183163643	0.005313535	4.194807529	100.6754	7.299139023	7.060819626	0.028220367	22.273716	534.5692139	24	18943.4458	
	18	486.5524	794.2071533	3.461857	14.79664	2.54454827	2.459834576	0.005986916	4.754928589	114.1183	7.134113789	6.896563053	0.027563863	21.891592	525.3981934	24	19060.97168	
	19	483.6535	789.4760132	3.455943	14.80708	2.51672506	2.436742544	0.005930715	4.683315754	112.3996	7.005812168	6.784039021	0.027114142	21.4064121	513.7539063	24	18947.42432	
	20	477.8487	780.0006104	3.436038	14.84216	2.59065294	2.523299932	0.006141382	4.790593147	114.9742	6.97449255	6.792581081	0.027148295	21.176733	508.2416077	24	18720.01465	
	21	480.8378	784.8795776	3.424105	14.86321	2.72557831	2.664097548	0.006484061	5.089735985	122.1537	6.953453064	6.795657158	0.027160568	21.3191166	511.6588135	24	18837.10986	
	22	484.3769	790.6555176	3.443478	14.82905	2.67125869	2.59504509	0.006316001	4.993916988	119.854	7.106926441	6.907814503	0.027608845	21.8304005	523.9296265	24	18975.73242	
	23	483.1265	788.6151733	3.415879	14.8777	3.16919804	3.106060743	0.007559744	5.960186958	143.0445	6.887209892	6.747563362	0.026968341	21.2693958	510.4654846	24	18926.76416	
	24	480.7805	784.7854614	3.407866	14.89184	3.24312615	3.184297085	0.007750162	6.083010674	145.9922	6.821549416	6.697784424	0.026769396	21.0154037	504.3696899	24	18834.85107	
	25	473.8351	773.4488525	3.405194	14.89655	3.14980173	3.093961239	0.007530295	5.82805872	139.8734	6.644122601	6.529099464	0.026095213	20.186358	484.4466064	24	18562.77246	
	26	472.2363	770.8389893	3.392285	14.9193	3.44964671	3.402319193	0.008280799	6.38492012	153.2381	6.435693741	6.348723888	0.025374295	19.5625458	469.5010986	24	18500.13574	
	27	470.0746	767.3096924	3.392793	14.9184	3.4922545	3.443571568	0.008381203	6.432202339	154.3728	6.447776318	6.360749722	0.02542235	19.5076294	468.1831055	24	18415.43262	
	28	474.7966	775.0183716	3.36068	14.97503	3.1232512	3.107761621	0.007563884	5.864446163	140.7467	6.893091202	6.864984035	0.02743765	21.2643967	510.3454895	24	18600.44092	
	29	484.1042	790.2115479	3.423191	14.86482	2.83469248	2.771386147	0.006745194	5.33052206	127.9325	7.132205963	6.973283291	0.027870495	22.0251675	528.6040039	24	18965.07715	
	30	481.6492	786.5299072	3.424401	14.86267	2.71752262	2.654598236	0.006460946	5.085642338	122.0554	6.820118427	6.66314888	0.026630962	20.9481373	502.7553101	24	18876.71777	
Total		333,515	552757.4059							158,688					353,731	16888.39	13,169,645	
Average		469.0793	777.4365765	3.354698	14.87476	4.94325323	5.273685346	0.013010454	9.499417841	223.1901	6.699588397	6.674163099	0.027040551	21.0249704	497.511807	23.10313	18015.92979	
Ann Avg.		166,758								79,344					176,865	8444.196	6,584,822	

6455.708173 mmscf/yr

Fuel Sulfur Content

Month	ppm S	gr S/100 scf
May-02	<1.0	<0.06
Jun-02	<1.0	<0.06
Jul-02	<1.0	<0.06
Aug-02	<1.0	<0.06
Sep-02	<1.0	<0.06
Oct-02	<1.0	<0.06
Nov-02	<1.0	<0.06
Dec-02	<1.0	<0.06
Jan-03	<1.0	<0.06
Feb-03	<1.0	<0.06
Mar-03	<1.0	<0.06
Apr-03	<1.0	<0.06
May-03	<1.0	<0.06
Jun-03	<1.0	<0.06
Jul-03	<1.0	<0.06
Aug-03	<1.0	<0.06
Sep-03	<1.0	<0.06
Oct-03	<1.0	<0.06
Nov-03	<1.0	<0.06
Dec-03	<1.0	<0.06
Jan-04	<1.0	<0.06
Feb-04	<1.0	<0.06
Mar-04	<1.0	<0.06
Apr-04	<1.0	<0.06

APPENDIX C

PROPOSED CHANGES TO CONDITIONS OF CERTIFICATION

II. Demand Conformance, Condition 1 (pp. 38 –39 of the original decision) should be deleted in its entirety as follows:

~~1. Certification of the project, as considered during this proceeding, shall expire twenty years following commencement of firm operation, unless extended by act of this Commission or other entity with such Authority.~~

~~Verification: Sycamore Cogeneration company (SCC) shall notify the CEC Compliance Project Manager in the next periodic compliance report of the date of commencement of firm operation, as defined by the Parallel Generation Agreement. This firm date shall establish the commencement of the twenty year period referred to above.~~

III. Engineering Analysis, A. Conformity with Cogeneration Criteria, Condition 1 (pp 43 – 44) of the original decision) should be deleted in its entirety as follows:

~~1. Over the lifetime of the project, the facility shall be operated as a cogeneration system in accordance with the definition of cogeneration contained in Public Resources Code sections 25134(a) and (b) and Title 18 CFR, sections 292.205(a)(1) and (2)(i)(B).~~

~~Verification: The Sycamore Cogeneration Company (SCC) shall file with the CEC during each calendar year an annual report in which the monthly values of plant operating parameters will be set forth in copies of the following documents, with dollar amounts omitted:~~

~~a. monthly fuel use (includes quantity and BTU value) as evidenced by an invoice form gas supplier(s).~~

~~b. monthly electrical sales (includes kWh) as evidenced by an invoice to Southern California Edison Company. In addition, a monthly statement will~~

~~be submitted for the amount of kilowatt hours that were used for station power and light and line losses.~~

c. ~~monthly steam sales (includes quantity an BTU value) as evidenced by an invoice to Texaco Producing Inc.~~

d. ~~if the rate of items a., b., or c. above differs by more than ±5, ±15, and ±10 percent, respectively, from rated conditions, SCC (Applicant) will provide at the specific written request of the CEC staff an explanation of such anomaly.~~

Air Quality Condition AQ-13 should be deleted in its entirety as follows:

~~AQ-13 The Sycamore Project facility shall operate as a cogeneration facility pursuant to Public Resources Code Section 25134 for thermally enhanced oil recovery operations.~~

~~Verification: Sycamore Cogeneration Company shall maintain records on steam production as a portion of the operation log required in condition AQ-11. The record shall include, but is not limited to, hours of operation of the turbines and HRSGs, lb/hr of steam produced and temperature and pressure of steam produced.~~

Air Quality Condition AQ-18 should be modified to revise the startup and shutdown emission limit for CO as follows:

AQ-18 a. Startup or planned shutdown of a CTG shall not exceed a time of period of two (2) continuous hours.

b. For all CTGs the following ~~hourly~~ emission limits shall apply during times of startup or ~~planned~~ shutdown and shall be averaged over the ***time period specified below*** ~~two hour period allowed for startup or planned shutdown~~:

NO_2	140 lbm/hr ***(2-hr average)***
CO	***200 lbm/hr (1-hr average),*** 140 lbm/hr ***(2-hr average)***

Air Quality condition AQ-19 should be modified to be consistent with the recent CEC amendment to the KRCC license as follows:

AQ-19 ~~Pollutant emissions from each combustion turbine prior to being retrofitted with the DLN combustor shall not exceed the following limits, except during times of startup or shutdown as defined in Condition AQ-18:~~

~~Gas Fired Case:~~

~~Particulates - 5.0 lbm/hr as PM10~~
~~Sulfur Compounds - 0.5 lbm/hr as SO_2~~
~~- 0.6 lbm/hr as SO_4~~
~~Oxides of Nitrogen - 140.0 lbm/hr as NO_2~~
~~Hydrocarbons - 2.5 lbm/hr (Non-meth)~~
~~Carbon Monoxide - 392 lbm/day~~

Pollutant emissions from each ~~DLN~~ CTG shall not exceed the following limits except during times of startup or shutdown as defined in Condition AQ-18:

Gas Fired Case:

Particulates	- 5.0 lbm/hr as PM10
	- 120.0 lbm/day as PM10
Sulfur Compounds	- ***0.9*** ~~0.5~~ lbm/hr as SOx (as SO_2)
	~~- 0.6 lbm/hr as SO_4~~
Oxides of Nitrogen -	1629.6 lbm/day as NO2
	- 67.9 lbm/hr as NO_2 and 16.4 ppmv at 15% O_2, on a 3 hour rolling average.
	~~Not to exceed -~~ 79.7 lbm/hr, ***1 hour average***
Hydrocarbons	- 2.5 lbm/hr (Non-ethane)
Carbon Monoxide	-1056 lbm/day and 25 ppmv at 15% O_2

Air Quality condition AQ-30 should be modified to be consistent with condition AQ-5g as follows:

AQ-30 Each CTG shall have a maximum heat input of ***1020*** ~~825~~ MMBtu/hr on an LHV basis. Firing rate limit can be increased upon SJVAPCD-witnessed emission sampling demonstration that compliance with emission sampling limits can be achieved at the higher fuel consumption rates.